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**Corporate Governance and Performance of Microfinance
Institutions (MFIs):
A Comparative Study in Sri Lanka and India**

A thesis
submitted in fulfilment
of the requirements for the degree
of
Doctor of Philosophy in Finance
at
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by
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ABSTRACT

This thesis investigates the impact of corporate governance practices on financial performance and outreach of microfinance institutions (MFIs) in Sri Lanka and India. Guidance and principles developed from prior research which has predominantly focussed on corporate governance relating to corporations in mature financial markets may not be efficacious. There is a need for a more specific approach to identify better governance structures for the microfinance sector which will support MFIs to attain long-term sustainability of the industry. In order to contribute to this debate, this research examines (i) the relationship between corporate governance practices, financial performance and outreach of Sri Lankan MFIs (ii) the relationship between corporate governance practices, financial performance and outreach of Indian MFIs (iii) MFIs' corporate governance and performance differences between Sri Lanka and India and (iv) the relationship between corporate governance and performance of MFIs based on a combined sample and considering the influence of national governance quality.

A study of corporate governance in the microfinance sector is timely and important as unfair practice accusations against MFIs raise questions around what is an appropriate framework for monitoring and control of MFI activities. A well-structured corporate governance practice may reduce the impact of corruption and undue bureaucracy by increasing transparency and accountability of funds utilised in microfinance activities. Even though studies of corporate governance and firm performance in mature markets are largely and rapidly evolving, their impact on MFI performance is little researched and reported. It is argued that MFIs which maintain good corporate governance practices will be financially and socially sustainable.

This thesis makes a number of contributions to the existing knowledge of corporate governance and MFI performance in several ways. First, it provides evidence from Sri Lanka and India of what aspects of corporate governance need to be strengthened and how much impact each individual component has on MFI financial performance and outreach. Second, the study identifies the importance of considering differences in institutional values, culture, and the environment of each country and points to the risk of applying normative assertions of corporate governance practices in the microfinance sector. Third, this study, through careful

diagnostic testing, uses microeconomic techniques to control endogeneity which may have negated some findings reported in the literature. In particular, unobserved heterogeneity, simultaneity and dynamic endogeneity inherent in the corporate governance–performance relationship studies are eliminated. Finally, in contrast to extant studies in the microfinance sector, this is the first direct study to accommodate corporate governance, financial performance and outreach of MFIs in both Sri Lanka and India. The impact of cross-country differences in government effectiveness, regulatory quality and rule of law on MFI performance is also considered.

Data needed to test various hypotheses are sourced from the Microfinance Information Exchange (MIX) database, Lanka Microfinance Practitioners' Association (LMFPA) in Sri Lanka and Sa-Dhan, the microfinance network in India. Furthermore, firm-level corporate governance data are collected from the individual institutions by going through their annual reports, individual firm websites and through personally contacting the individual firms. The sample period for the Sri Lankan and Indian MFIs is 2007 to 2012. Fixed-effect, random-effect and system generalised method of moment (GMM) estimator approaches are used to answer the research questions.

In Sri Lanka, female CEO, female chair, larger boards, client representatives on board and internal audit function improve the financial performance of MFIs. When there are more female directors and more international/donor representatives on a board, financial performance declines. The outreach of Sri Lankan MFIs improves when there are more international/donor representatives and fewer client representatives on boards.

In the Indian context, the results indicate that international/donor representatives, client representatives and outside directors on board, and an internal audit function statistically significantly positively correlate with financial performance of MFIs. For female chair and number of female directors on the board there is a negative correlation. However, in India, better outreach can be achieved when there is a female chair and when there are more female directors and more international/donor agencies representatives on the board. Female CEOs and larger boards appear to have negative effect on MFI outreach.

The findings from Sri Lankan MFIs support the prediction of agency theory regarding the effective monitoring impact the performance of MFIs. But it is contrary to the number of board members as larger boards positively associate with MFI financial performance. This is consistent with resource dependency theory as larger boards provide a wide range of expertise and resources for the institution. In a voluntary organisation costs are reduced when board members are involved in a range of activities or functions that might otherwise have been covered by paid staff. This is also a way of aligning board members with senior management. The issue that arises is the extent to which this goal congruence is tilted toward management aspirations and produces a shadow agency cost. Even though agency theory emphasises the negative impact of duality, from the findings of this study it is difficult to make inferences about the separation of CEO and chair is better for MFI financial performance as well as there is no impact for MFI outreach. Findings of Indian analysis are also consistent with the perspectives of agency theory to a large extent, as diversified boards improve MFI financial performance. Similar to Sri Lanka, CEO/chair duality has no effect on MFI financial performance or outreach, which is not consistent with the predictions of agency theory.

Importantly, the results of this study suggest that the impact of corporate governance on MFI performance persists in both countries even after the dynamic nature of the corporate governance and performance relationship is taken into consideration. Financial performance of both countries is improved with larger boards with more client representation. For both countries, more female representatives and outside directors on the board and internal audit function negatively affect MFI financial performance. Outreach in both countries is enhanced with more international/donor representative and fewer outside directors.

Notably, the findings of this study indicate that the relationship between current MFI performance and past (one-year lagged) performance is statistically significantly positive for financial performance and outreach variables in both countries, suggesting that the corporate governance – performance relationship of MFIs should be examined in a dynamic framework. This highlights the importance of considering the past performance as an independent variable for current corporate governance and performance studies in the microfinance sector. Furthermore, this study shows the quality of national governance has a statistically

significantly positive effect on financial performance and outreach of MFIs in both countries.

This research demonstrates that corporate governance practices in for-profit companies have some synergies with the microfinance industry. The results reported in this study reflect a deeper commitment to robustness and micro econometric issues than previous studies and this robustness provides a platform for industry and political policy developments that can significantly enhance the quality of life for the poorest and low income people in Sri Lanka and India. The opportunities for microfinance to make a significant difference to the poorest of the poor in low income countries and emerging economies are not waning. Further research in other countries is required to establish if this is a generalisable trend or unique to Sri Lanka and India.

Finally, this research recommends that it is possible to improve corporate governance practices of MFIs in Sri Lanka and India by promulgating a regulatory and supervisory system. The sector needs a strong regulatory framework to strengthen its governance and institutional structures, and to enhance opportunities for the sustainability and development of the microfinance industry.

THESIS RELATED RESEARCH OUTCOMES

A number of journal articles and conference papers have been produced from this thesis as follows.

JOURNAL ARTICLES PUBLISHED

Thrikawala, S. S., Locke, S. & Reddy, K. (2015). An empirical analysis of corporate governance impact on outreach of microfinance institutions (MFIs). *Corporate Ownership & Control*, 13(1), 8-14.

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Thrikawala, S.S. Locke, S. & Reddy, K. (2013). Corporate governance – performance relationship in microfinance institutions (MFIs). *Asian Journal of Finance and Accounting*, 5(1), 160-182.

CONFERENCE PAPERS

Thrikawala, S. S., Locke, S., & Reddy, K. (2015). *Does corporate governance (CG) impact the financial performance of microfinance institutions (MFIs)? Evidence from South Asia*. Paper presented at the 19th New Zealand Finance Colloquium, Waikato Management School, University of Waikato, Hamilton, New Zealand.

Thrikawala, S. S., Locke, S., & Reddy, K. (2014). *The effects of corporate governance on microfinance financial performance and outreach: Evidence from an emerging economy*. Paper presented at the Australasian Finance and Banking Conference in Sydney.

Thrikawala, S. S., Locke, S., & Reddy, K. (2014). *Gender diversity and financial performance of microfinance institutions (MFIs): Evidence from a developing country in South Asia*. Paper presented at the 18th New Zealand Finance Colloquium (PhD Symposium), AUT Business School, Auckland University of Technology, Auckland, New Zealand.

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FORTHCOMING

BOOK CHAPTER

Corporate governance practices and performance of microfinance sector

WORKING PAPERS

Board structure-performance relationship in microfinance institutions' (MFIs) in an emerging economy.

Dynamic endogeneity and corporate governance–performance relationship: Lessons from the microfinance sector.

Financial performance of microfinance institutions (MFIs): Does gender diversity matters?

Does gender diversity impact the operational sustainability of microfinance institutions (MFIs) in Sri Lanka.

Does corporate governance (CG) impact the financial performance of microfinance institutions (MFIs) in India?

DEDICATION

*To the memory of my loving
Mother,
Ramani Meemaduma
for
the great courage and strength,
you lifted me up*

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
ANCOVA	Analysis of Covariance
CBSL	Central Bank of Sri Lanka
CEO	Chief Executive Officer
CGAP	Consultative Group to Assist the Poor
CII	Confederation of Indian Industry
CRB	Co-operative Rural Bank
CSE	Colombo Stock Exchange
CSFI	Centre for the Study of Financial Innovation
CSR	Corporate Social Responsibility
DCD	Department of Co-operative Development
GDP	Gross Domestic Product
GMM	Generalised Method of Moments
GNI	Gross National Income
GTZ-ProMiS	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)-Promotion of the Microfinance Sector
IC	Insurance Company
ICASL	Institute of Chartered Accountants of Sri Lanka
ILO	International Labour Organisation
INR	Indian Rupees
IV	Instrumental Variable
JLGs	Joint Liability Groups
LCB	Licensed Commercial Bank
LKR	Sri Lankan Rupees
LMFPA	Lanka Microfinance Practitioners' Association
LSB	Licensed Specialised Bank
MCA	Ministry of Corporate Affairs
MFI	Microfinance Institutions
MIX	Microfinance Information Exchange
MPCS	Multi-Purpose Co-operative Society

NABARD	National Bank for Agriculture and Rural Development
NBFCs	Non-Banking Financial Companies
NBFIs	Non-Banking Financial Institutions
NGI	National Governance Indicators
NGOs	Non-Governmental Organisations
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Square
OSS	Operational Self-Sufficiency
PAR	Portfolio at Risk
RBI	Reserve Bank of India
RDB	Regional Development Bank
RFC	Registered Finance Company
ROA	Return on Assets
ROE	Return on Equity
ROSCA	Rotating Savings and Credit Association
RRBs	Regional Rural Banks
SAMN	South Asian Microfinance Network
SBS	Samurdhi Bank Society
SDB	SANASA Development Bank
SEBI	Securities Exchange Board of India
SHG	Self-Help Groups
SLC	Specialised Leasing Company
SMEs	Small and Medium Enterprises
SSs	SANASA Societies
TCCS	Thrift and Credit Co-operative Society
UN	United Nations
VIF	Variance Inflation Factor
YOGLP	Yield on Gross Loan Portfolio

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This study investigates the impact of corporate governance on financial performance and outreach of microfinance institutions (MFIs) in Sri Lanka and India. Commencing with prior research into corporate governance in mature and emerging markets, this study shows how the nature and the impact of corporate governance in the microfinance sector differs from other sectors.

The work presented in the thesis is significant and important because it examines the hitherto neglected issue of the contribution of corporate governance to the balance of financial performance and outreach. Without financial performance there is no sustainable outreach. Without outreach the MFI is just another credit granting institution. Corporate governance that promotes financial performance may not be the same as corporate governance that promotes outreach, and vice versa. By examining in detail, this research shows how corporate governance contributes significantly to an understanding of components that are common to both goals, financial performance and outreach, and those that relate to only one goal. The tension and trade-off is important new information for all stakeholders of MFIs.

This research is important as MFIs are important service providers of finance for rural poor and other groups termed “unbanked people”. There are millions of people living without access to financial services, especially in developing countries. Demand for financial services surpasses the available supply (Barr, Kumar, & Litan, 2007; Imboden, 2005) and in developing countries, the formal banking sector serves approximately 20% of the population (Berenbach & Churchill, 1997; Robinson, 2001). The microfinance industry arose to challenge the prevailing low levels of financial servicing by building a financial market to meet the diverse financial needs of under-served people (Armendáriz de Aghion & Morduch, 2004; Hermes & Lensink, 2011), emerging with the objective of alleviating poverty, especially in developing countries (Brau, Hiatt, & Woodworth, 2009; Daley-Harris, 2006).

Extensive interest in access to microfinance services has generated massive worldwide growth in the microfinance sector. It is estimated that there were around 10,000 MFIs issuing loans around the world in 2007 (Ming-Yee, 2007). Data from the State of the Microcredit Summit Campaign Report 2009 shows that 106.6 million of the world's poorest clients had been reached at the end of 2007 and 83.2% were women (Daley-Harris, 2009). In 2010, the number of poor accessing credit and financial services was 138 million. This dramatic growth in the sector creates immense competition between MFIs which may ultimately become the source of serious complaints about their unfair practices and low transparency due to lack of governance.

In the MFI literature, good governance is emphasised as one of the key elements for strengthening stewardship, achieving MFIs' primary objectives and promoting further development of the industry (Cull, Demirgüç-Kunt, & Morduch, 2007; Gant, de Silva, Atapattu, & Durrant, 2002; Hartarska, 2005; Labie, 2001; Mersland & Strøm, 2009; Rock, Otero, & Saltzman, 1998; van Greuning, Gallardo, & Randhawa, 1998). Many MFIs struggle to achieve financial self-sufficiency while delivering quality service for their low-income clients. Good governance practices help MFIs to operate more efficiently and transparently. The Centre for the Study of Financial Innovation (CSFI, 2008) states that corporate governance practice is one of most challenging areas in the microfinance sector and has become a hot issue among policy makers.

Empirical studies relating to better corporate governance practices in MFIs have not yet been well expanded. There are a few studies on the direct relationship between better corporate governance and greater performance of MFIs but the results are ambiguous. Although empirical evidence is relatively scant and inconclusive, there is a conventional wisdom among microfinance practitioners that improved corporate governance practices will lead to improved profitability and outreach (Bassem, 2009; Cull et al., 2007; Hartarska, 2005; Hartarska & Nadolnyak, 2007; Mersland, 2009). It appears that there is an emerging consensus to conduct more studies on the corporate governance of MFIs to analyse the relationship between institutional success and corporate governance, especially for developing countries. Therefore, to examine the relationship between corporate governance and performance of MFIs, this study selects Sri Lanka and India to be the platform to

conduct the empirical research as they are the most closely related developing countries in terms of economic conditions in the South Asian region.

The remainder of this chapter discusses the economic relationships and characteristics of Sri Lanka and India, followed by the objective of the study and the research questions. The chapter then briefly explains the significance of the study and the structure of the thesis.

1.2 Comparative Study between India and Sri Lanka

In order to address the research questions, this study selects Sri Lanka and India as the two emerging countries in the South Asian region. MFI research on corporate governance and performance in Sri Lanka and India is scant and the topic receives relatively little attention in the South Asian region in general. Both countries are recognised as low- and middle-income economies with seemingly diverse characteristics across a range of political, economic, social and demographic factors. Therefore, comparison between these two countries is factual and realistic. The following section 1.2.1 discusses some economic relationships between Sri Lanka and India. Similarities and differences between the two countries are briefly explained in section 1.2.2¹.

1.2.1 Economic relationship between Sri Lanka and India

The democratic socialist republic of Sri Lanka is an island in the Indian Ocean. The republic of India is also situated in the Indian Ocean. Sri Lanka and India commemorated internal political independence from British rule in 1948 and 1947 respectively. After independence from Britain both nations joined several regional and multilateral organisations, such as the South Asian Association for Regional Cooperation, South Asia Co-operative Environment Programme and South Asian Economic Union, working to enhance cultural, strategic and commercial values for their own people. Ondaatjie (2007, September 25) found that since a bilateral free

¹ See section 2.6 in Chapter 2 for more information about the microfinance sector in Sri Lanka and India and section 3.7 and 3.8 in Chapter 3 for corporate governance systems in Sri Lanka and India respectively.

trade agreement was signed and came into effect in 2000, Indo-Sri Lankan trade went up 128% by 2004 and quadrupled by 2006, reaching USD 2.6 billion. Among the global imports in Sri Lanka, India contributes 14% and is the fifth major export destination for Sri Lankan goods, accounting for 3.6% of its exports. Both nations are also signatories of the South Asia Free Trade Agreement and on-going dialogue is still in progress to expand this agreement to build stronger commercial relations and increase corporate investment and ventures in various industries between these two countries.

1.2.2 Similarities and differences between Sri Lanka and India

This section explains similarities and differences between Sri Lanka and India. While there are economic, political, demographical and cultural differences between the two countries, they are most similar when compared with other countries in the South Asia region.

The population of India was 1,250 million in 2013 which is 17% of the total global population. Sri Lanka's population was 20.48 million in 2013 (World Bank, 2014). The population of India is 60 times greater than Sri Lanka. Chronic poverty is a key issue for India and prevails in many parts of the country. In 2011, 32.7% of the population (394 million people) lived below the extreme poverty line (Zhang & Wong, 2014). In 2012, the poverty level in India was 23.6% (World Bank, 2014) and in Sri Lanka 6.7% in 2012 (Department of Census and Statistics, 2014).

An uneven spread of socio-development indicators including health, education and infrastructure hold-ups are indicative of the challenges for Indian growth. Infant mortality, life expectancy and literacy of India were 48 deaths/1,000 live births, 65 years and 63% respectively in 2010, whereas statistics for these same indicators in Sri Lanka were 14 deaths/1,000 live births, 75 years and 91% in 2010. There appears to be noticeable differences between the two countries for health and education indicators. However, there were similar indicators for birth and death rates in both countries. Birth and death rates in India were 22 births/1,000 population and 8 deaths/1,000 population respectively in 2010, and 18 births/1,000 population and 7 deaths/1,000 population respectively in Sri Lanka (World Bank, 2012a).

India is now one of the world's fastest growing economies (Frankfurt School of Finance & Management, 2009) and the eleventh largest economy by Gross Domestic Product (GDP) in the world, with GDP growing by 8.8% in 2010 (World Bank, 2012a). India had a similar level of annual growth rate of GDP as Sri Lanka in 2010 and better economic and trade conditions. India does not have a strong agricultural sector. In 2010, the service sector of India accounted for 55% of the country's GDP but the industrial and agricultural sectors contributed only 26% and 19% respectively (World Bank, 2012a). Sri Lanka's economy grew more rapidly after the end of the civil war in 2009, which resulted in an increase in the GDP growth rate of 8% in 2010. It has been reported in recent years that Sri Lanka has strong growth rates with its GDP per capita ahead of other countries in the South Asia region. Similar to India, Sri Lanka too has a strong service industry consisting of 58% GDP, while the industrial and agriculture sectors' contribution to the national economy were 29% and 13% respectively in 2010 (World Bank, 2012a).

The microfinance sector in India has achieved greater authenticity with the government and registered non-banking financial companies (NBFCs) under the Reserve Bank of India (RBI). According to the South Asian Microfinance Network (SAMN, 2010), in 2009, 77% of the microfinance sector was regulated by the RBI. The Microfinance Information Exchange (MIX)² states that India is the world leader in microfinance industries as there were 20 MFIs ranked in top 100 in 2009 but no proper regulation to monitor them. In Sri Lanka, June 2015 Lanka Microfinance Practitioners' Association (LMFPA) has drafted a legal framework for the regulation and supervision of MFIs. Modoran and Grashof (2009) point out that there is a lack of regulatory and supervisory frameworks in Sri Lankan MFIs. They suggest that the microfinance industry can be developed by putting more effort into adopting best practices and to ensure a regulatory environment for their growth. Unlike India, Sri Lanka had only one MFI among the top 100 MFIs in 2009 but according to MIX, the SANASA Development Bank (SDB) of Sri Lanka is the second largest MFI in the world.

² MIX is a non-profit private organisation focused on promoting information exchange in the microfinance industry worldwide.

Generally, the Asian markets are characterised by ineffective markets for corporate control (Nguyen, Locke, & Reddy, 2014). Also the World Bank (2012b) indicates that the South Asian region has weaker legal institutions and more expensive regulatory processes than other regions (except Sub-Saharan Africa). Weaker legal institutions refer to how weak the institutions are in protecting investors, enforcing contracts and resolving insolvency. Despite there being weaker legal institutions in South Asia, Sri Lanka and India attempt to maintain a good standard of governance practices in listed companies. Both Sri Lanka and India are ranked 46th out of 183 economies for the protection of investors.

India is a federation with a parliamentary system. Power has been distributed between the federal government and state governments. India has an executive president, parliamentary system, led by a prime minister and a three-tier independent judiciary that consists of the Supreme Court headed by the Chief Justice, high courts and a number of trial courts. Power decentralisation to the states may mitigate the geographic discrepancies. There was an instance where the Andhra Pradesh legislative passed a client protection law due to the high suicide rate in the province. Now discussion is in progress to formulate this law nationwide through the RBI.

Sri Lankan history traditionally starts in 543 BC with the landing of Vijaya who came from southwest coast of India. Historical evidence shows that Sri Lankan dynastic history, commencing with Prince Vijaya, spanned a period of 2,359 years from 543 BC through to when the British Empire captured the hill country kingdom in 1815 AD. There was a tradition among Sri Lankan kings to bring their first queen from India, which created an opportunity to increase Indian people in Sri Lanka so that their habits and religious belief became common practice and tradition in the Sri Lankan culture. Sri Lanka is a democratic republic and a unitary state which is governed by a semi-presidential system and a parliamentary system. The president of Sri Lanka is the head of the government and has executive powers. Parliament in Sri Lanka is a mixed legislative system with 196 members elected in multiseat constituencies and 29 members elected by proportional representation. The judicial system is quite similar to India, as the Supreme Court is the highest and headed by the Chief Justice. A Court of Appeal, high courts and district courts are part of the judicial system.

Both countries are multi-cultural. The Census of India in 1961 identified that there were 1,652 mother tongues throughout India. In 1991 they formally estimated the number of languages was 400. The Official Languages Act 1963 states that when the constitution was formed, Hindi and English became the official languages of the Union of India till 1965. However, due to protests by many non-Hindi speaking states, the Act was amended and now there are total of 22 languages recognised as the official languages in addition to Hindi and English. Individual states have been given an option to adopt one of their own languages for official work (Amritavalli & Jayaseelan, 2007). Sri Lanka has only three major languages (Sinhala, English and Tamil) in all nine provinces of the country (Dharmadasa, 2007). The major religion in India is Hinduism, followed by Islam, Christianity, Buddhism and Sikhism. Buddhism, which emigrated from India, is the main religion of Sri Lanka. As with India, there are different types of communities and religions in Sri Lanka, including Hindu, Islam, Christian, etc. The immigration of people from India to Sri Lanka and similarities in the judicial, parliamentary and executive systems means these two countries, cultural, social and religious beliefs are quite similar, especially with the southern states of India.

Although these two countries have similar characteristics in the economic, social, cultural and political arenas, some important discrepancies exist in demographic, legislative and geographic areas. These similarities and differences may be embodied in the performance of MFIs in the two countries. This research conducts a cross-country comparison to identify the differences in corporate governance practised by MFIs in Sri Lanka and India. In this study, national governance quality indicators are used to shed light on the impact of country-level factors on MFI performance.

1.3 Objectives and Research Questions of the Study

The relationship between corporate governance, financial performance and outreach of MFIs in Sri Lanka and India is investigated in this thesis. Prior research into the microfinance industry has identified good corporate governance practices, such as board diversity, board independence and leadership structure, as key factors in strengthening MFIs to attract more clients and more investors, which will lead to

further development of the industry (CSFI, 2008; Cull et al., 2007; Gant et al., 2002; Labie, 2001; Mersland & Strøm, 2009; Rock et al., 1998; van Greuning et al., 1998). Good corporate governance practices ensure that an MFI's strategy, operations and results are all aligned with its mission. However, consideration of the empirical investigations into the microfinance sector, as they relate to corporate governance, suggests a low general awareness of the impact of corporate governance. Labie and Mersland (2011, p. 283) state that "the issue of corporate governance has therefore been of increasing interest for microfinance as it is today considered to be one of the weakest areas in the industry". There is an emerging consensus for the need to conduct more studies on corporate governance of MFIs to analyse the relationship between institutional success and corporate governance of MFIs, especially for developing countries (Bassem, 2009; Cull et al., 2007; Hartarska, 2005, 2009; Hartarska & Nadolnyak, 2007; Mersland, 2009; Mersland & Strøm, 2009). Inferences about what ought to be done, as good governance in MFIs are largely based on analyses of problem cases. This current research expands upon prior research, which has been limited to analysing a number of projects, with the aim of identifying the impact of corporate governance on MFIs' performance.

In order to achieve this aim, this study has established five specific research objectives.

- i. To understand the key corporate governance components that impact upon the performance of MFIs in Sri Lanka and India by examining prior theoretical and empirical research on corporate governance
- ii. To analyse the impact of recognised corporate governance practices on financial performance and outreach of MFIs in Sri Lanka
- iii. To analyse the impact of recognised corporate governance practices on financial performance and outreach of MFIs in India
- iv. To examine whether corporate governance practices of MFIs differ between Sri Lanka and India
- v. To analyse the impact of recognised corporate governance practices on performance of MFIs in two South Asian countries by considering an aggregated sample

To achieve these research objectives the following more specific research questions are need answered:

- Q1. Based on the empirical research, what factors are proposed as highly important in the corporate governance of MFIs?
- Q2. Do the factors noted in response to Q1 appear adequate to explain the financial performance and outreach of MFIs in Sri Lanka and India?
- Q3. Do the factors noted in response to Q1 appear adequate to explain difference in the two countries?
- Q4. Do the factors noted in response to Q1 appear adequate to explain difference in a combined sample with the use of a dynamic modelling approach and the quality of national governance indicators?
- Q5. Based on the data analysis, what corporate governance practices are most significant and may potentially be included in a framework to achieve better performance of MFIs in Sri Lanka and India?

1.4 Significance of the Study

This study is novel in that it is the first to explore the corporate governance – financial performance and outreach nexus of MFIs in Sri Lanka and India by using a deep, historical database. Studying a single country provides deep and narrow conclusions and suffers from a lack of generalisability. Multi-country studies conducted on the corporate governance-performance relationship provide broad and shallow analysis that can be potentially generalisable. They also suffer from the absence of historical and comprehensive data on corporate governance, which can make it difficult to provide robustness conclusions (Black, de Carvalho, Khanna, Kim, & Yurtoglu, 2014). This indicates that the database should be comprehensive and have many firm-year observations across countries. However, collecting corporate governance data for many institutions across many countries is often difficult, especially in emerging sectors like microfinance. To address this, the current study uses two countries, which helps to promote generalisability of the findings with a deep and historical database. The contribution of this form of research is the examination of corporate governance practices and their impact on financial performance and

outreach based on a comprehensive sample of MFIs, including many firm-year observations across two selected countries.

There have been a few studies conducted for different countries and regions, but not particularly for the South Asian region. A comparison of Sri Lankan and Indian MFI governance is helpful and new. A simple survey conducted at the end of 2013 to find publications on the corporate governance and MFI performance relationship in Sri Lanka and India found no empirical research considering the case of either country³. This research fills the gap in the extant corporate governance literature as it compares two similar countries in relation to MFIs operations. In the context of these countries, it is important to answer the question: how do corporate governance practices contribute to achieve superior performance of MFIs in Sri Lanka and India? Furthermore, unlike mature financial markets, in general, Asian markets are characterised by ineffective markets for corporate controls (Nguyen et al., 2014). Therefore, it is important to consider whether the internal corporate governance structure impacts MFI financial performance and outreach in Asian countries, which have less effective external corporate governance systems.

Consistency in the findings of the corporate governance – performance nexus is rare and struggles to identify the significant impact (Lapie & Mersland, 2011). Mixed results support the view that corporate governance practices may vary based on institutional differences between countries and the use of different estimation methods (Ahrens, Filatotchev, & Thomsen, 2011; Bhagat & Bolton, 2008). Augustine (2012, p. 660) states that the “researchers have not been able to explain the heterogeneity in corporate governance practices and performance of microfinance firms operating in the same competitive and institutional contexts”. This study uses an agency theory framework, interpreted in a broad stakeholder context, which is not incompatible with ideas promulgated in studies using narrower models, such as stewardship theory, stakeholder theory, legitimacy theory and resource dependency theory, in order to investigate empirically how corporate

³ In line with Love (2011), researcher has used the key words of ‘corporate governance’ + ‘performance’ + ‘microfinance’ + ‘Sri Lanka’ for Sri Lankan studies, and ‘corporate governance’ + ‘performance’ + ‘microfinance’ + ‘India’ for Indian studies to search related empirical work in www.SSRN.com, www.proquest.com and <https://scholar.google.co.nz> databases. The search results show zero results for both countries.

governance practices may enhance financial performance and outreach in the microfinance sector. This study emphasises guidance for selecting directors to MFI boards in relation to achieving board diversity. The findings contribute to knowledge and will assist MFIs to better structure their boards in terms of achieving financial performance and better outreach.

Prior studies reveal the importance of considering the country-level characteristics, in addition to the firm level characteristics, for cross-country studies (Aslan & Kumar, 2014; Filatotchev & Jackson, 2013; Kumar & Zattoni, 2013; van Essen, Engelen, & Carney, 2013). They highlight that the relationship between corporate governance and firm performance may be impacted by the quality of national governance mechanisms, such as legal system, rule of law and political situation. It is important to consider national governance quality measures for corporate governance – performance studies. In this cross-country study the national-level corporate governance indicators are assessed in terms of their impact on MFI performance. Prior studies on the South Asian region have not used the quality of national governance systems in which the MFI operates; this is the first study that incorporates national governance quality indicators on the corporate governance – performance relationship. The findings of this study are, to a certain extent, generalisable to the countries with similar national governance characteristics and the extent will be the concern of future research.

For micro-econometric empirical research in corporate governance, the biggest challenge is to deal with the endogeneity issue of corporate governance variables (Love, 2011; Marinova, Plantenga, & Remery, 2010; Schultz, Tan, & Walsh, 2010). There is no consensus on the nature of endogeneity as it is difficult to identify the exogenous factors in a governance structure (Wintoki, Linck, & Netter, 2012). In the literature on corporate governance three major sources of endogeneity are noted: time-invariant unobserved heterogeneity across companies, simultaneity and dynamic endogeneity. Most empirical studies employ a fixed/random effect approach or a traditional instrumental variable (IV) approach to overcome endogeneity issues arising from unobserved heterogeneity and/or simultaneity. These methods, however, are not designed to deal with dynamic endogeneity that arises when the corporate governance-firm performance relationship is influenced by past performance. If it is not controlled then it is not possible to establish causal

effect from the estimations (Wintoki et al., 2012). The current study examines whether or not corporate governance practices have any effect on MFI performance after controlling for the potential sources of dynamic endogeneity. The existing MFI corporate governance literature is added to by a new understanding of the dynamic nature of the corporate governance-performance relationship in MFIs. The combined dataset of Sri Lanka and India is used as it has enough data for the results to be meaningful. This is the first study that considers the dynamic nature of the corporate governance-performance relationship in the microfinance sectors in these two countries.

Microfinance has become a prominent poverty alleviation tool for India, facilitating the achievement of national policies and Millennium Development Goals. The Indian government and the RBI emphasise the need for enhancement of microfinance activities as a major contributor to poverty reduction and empowerment of Indian women (Sinha, 2012). The Andhra Pradesh microfinance crisis precipitated the need for policy makers and practitioners to reform the industry. Emerging from the crisis, the Indian government prepares to enact a law for MFIs to regulate their activities to ensure the clients' interests are addressed. The findings of this study may contribute to the development of the microfinance sector in India.

Sri Lanka is currently recovering from 30 years of devastating war and terrorism, only enjoying peace and harmony since May 2009. It is imperative for Sri Lanka to lift economic development and the enhancement of microfinance activities has become one of its major economic development goals. However, there is a lack of governance guidelines for Sri Lankan MFIs on how to improve their services in a broader context (Modoran & Grashof, 2009). In June 2015, LMFPA has introduced a new draft legal framework for the regulation and supervision of MFIs in Sri Lanka. The findings of this study do have significance for the analysis of policy implications of the microfinance sector in this recovering country.

The East Asian financial crisis of 1997, the global financial crisis of 2007 and large corporate scandals⁴ have indicated deficiencies in investor protection and corporate governance practices (Brunnermeier, 2009; Erkens, Hung, & Matos, 2012; France, Carney, McNamee, & Borrus, 2002 ; Lockhart, 2004; Radelet, Sachs, Cooper, & Bosworth, 1998) and raised concerns about the corporate governance practices of firms. To avoid future failures, it is important to reform corporate governance systems by reviewing the weaknesses in board composition, the failure of non-executive directors and the decisions of the board members (Brown & Gladwell, 2009). For countries such as Sri Lanka and India, foreign investments and trading are the major factors that drive the regulatory reforms in corporate governance. Corporate failures in Sri Lanka and India have increased the focus on good corporate governance in every sector, suggesting it is necessary for the transparency, accountability and efficiency of firm operations. Investors, creditors, donors and others stakeholders, such as employees, clients and governments, are now demanding transparency and accountability concerning how money is being utilised in microfinance activities. To attract more support from investors and donors, and to compete successfully with other worthy causes for donor funds, MFIs need to run their micro-financing activities more transparently (Caudill et al., 2009). Investors are also turning their attention to the characteristics and quality of MFIs' governing bodies (Otero, 2005). Unappealing governance practices may damage an MFI's reputation and increase the challenge faced in attaining a sustainable position in the microfinance industry (Caudill, Gropper, & Hartarska, 2009; Hartarska & Nadolnyak, 2007; Lapenu & Pierret, 2006; Sinclair, 2012). Therefore, it is important to focus on ways to improve corporate governance practices across industries and sectors which lead to better performance.

The health of a particular economy is highly dependent on the performance of banks and other financial institutions (Adams & Mehran, 2003). Advocates in the banking industry highlight the importance of ensuring an environment which supports sound corporate governance and the role of supervisors (Basel Committee on Banking Supervision, 1999; Morrison, Linda, & Colin, 2007; Mortlock, 2003). The presence

⁴ Enron and Tyco International (USA), HIH Insurance and OneTel (Australia) and Air New Zealand (New Zealand).

of sound regulation for the microfinance sector should help design comprehensive internal governance mechanisms. Substantial delays in implementing proper laws and regulations may cause failure in the industry. This study encourages policy makers to implement a sound regulatory framework for the sector. Morrison et al. (2007, p. 632) highlight that “given the breadth and depth of the financial services sector, analysis of the corporate governance features/requirements of specific sub-sectors is appropriate”. More studies are needed that focus on institutions other than banks in the financial sector. MFIs represent a considerable proportion of the financial sector, especially in developing countries. Regulators and policy makers have concerns regarding the effect of governance on the performance of financial institutions as safe and sound financial institutions improve the health of the overall economy (Adams & Mehran, 2003). As a result, the boards of directors in financial institutions have a crucial role to implement an effective corporate governance structure for their firms.

The significance of this study is further increased due to the growing international attention microfinance has received since the announcement by the Economic and Social Council of the United Nations (UN) that 2005 would be the “year of microcredit” and the following year, the awarding the Nobel Peace Prize to the Grameen Bank and Mohammad Yunus (Hermes & Lensink, 2007; Viada & Gaul, 2012). Eight years earlier, in 1997, the Micro Credit Summit boosted awareness of MFIs as an initial step of a decade-long campaign to provide credit to 100 million of the world’s poorest families by increasing self-employment (Daley-Harris, 2006). As a result, more people are aware and extol the merits of microfinance and that has encouraged more people to become involved (Lapie & Mersland, 2011). These initiatives have attracted more attention from national authorities and from international donor and development communities (Lapie & Mersland, 2011). Furthermore, during the last decade, the industry attracted large amounts of money from international banking and investment communities. As a result, foreign capital investments (both debt and equity) in this industry more than tripled to USD 4 billion (Reille & Forster, 2008) between 2004 and 2006. At the end of 2010, these investments had quadrupled and were calculated to be valued at USD 13 billion (Reille, Forster, & Rozas, 2011). This tremendous growth in the sector also creates a greater number of clients, assets and management structures.

MFIs have been criticised for drifting away from their mission. The performance of MFIs encompasses both financial performance of microfinance activities and the outreach to poor borrowers (Mersland & Strøm, 2009; Rock et al., 1998) which are not necessarily compatible (Hermes, Lensink, & Meesters, 2011). When MFIs concentrate more on financial performance, there is a risk of losing the vision of serving rural poor, achieving financial success through consumer loans to clients in urban areas (Hermes et al., 2011; Montgomery & Weiss, 2011; Rooyen, Stewart, & Wet, 2012). The New York Times also criticised the microfinance sector in general with a front page article titled: “Banks making big profits from tiny loans” (Sinclair, 2012). Research has observed that this is related to MFIs’ corporate governance practices (Arena, 2012; Varotttil, 2012) because corporate governance has the potential to significantly advance the mission duality of MFIs. This has become an important issue among policy makers, considering which model of corporate governance practices should be recommended for MFIs to enable them to perform better (Milana & Ashta, 2012) both financially and socially. The future success of the sector is dependent on finding ways to reconcile financial viability with social efficacy. However, there is limited scholarly research covering the social performance (outreach) of MFIs in relation to corporate governance. No studies have been conducted in South Asian countries to identify specific characteristics of corporate governance for MFI performance. This current research contributes to the body of knowledge by incorporating governance factors relating both to financial performance and outreach of MFIs.

1.5 Structure of the Thesis

The remainder of the thesis is structured as follows.

Chapter 2 explains profound information about the microfinance sector. It discusses the definitions, historical expansion, developments and market size of the microfinance sector around the world. It then describes in depth the evolution of the sector, roles performed by different institutions and challenges prevailing in Sri Lankan and Indian microfinance sectors.

Chapter 3 provides a review of theoretical and empirical literature relating to corporate governance which is significant to the focus of this study. In addition, this

chapter describes the nature of corporate governance in Sri Lanka, India and the microfinance sector. For regulators and professionals, it is necessary to understand why corporate governance is important and what factors contribute to firm performance. This chapter reviews significant theories and extant corporate governance literature to identify important corporate governance mechanisms for MFI performance.

Chapter 4 reviews extant empirical corporate governance research and then considers the financial performance and outreach link, establishing nine hypotheses. The relationship between corporate governance, financial performance and outreach of MFIs in Sri Lanka and India are presented as testable propositions. Finally, this chapter discusses the independent, dependant and control variables employed in the analysis to follow, along with their respective measurement.

Chapter 5 presents the research method, data collection process and the model specification used for the empirical analysis of the thesis. It further explains the MFI definition, sampling procedure, sample size, data cleaning and editing, the research model, data analysis techniques and specification tests.

Chapter 6 describes the investigation of the nature of the relationship between corporate governance, financial performance and outreach of MFIs in Sri Lanka. Through this analysis, the study contributes to the understanding of how corporate governance affects MFI performance in Sri Lanka.

Chapter 7 presents the examination of the relationship between corporate governance, financial performance and outreach of MFIs in India. The findings presented in Chapter 7 compare with Chapter 6 to understand the differences. The Indian results do differ from Sri Lankan results, and the question why is answered.

Chapter 8 provides a discussion of the corporate governance and MFI performance based on a combined Sri Lanka – India sample, taking into account the national-level governance characteristics. This analysis considers how national governance quality impacts MFI financial performance and outreach. Chapter 8 also investigates the relationship between corporate governance and MFI performance after controlling for potential sources of endogeneity.

Chapter 9 concludes the thesis by providing brief information about the focus of the study, a summary of the findings, how the study contributes to the existing literature,

policy implications, limitations of the study and recommendations for potential future studies. This chapter summarises the results of testing hypotheses in chapters 6, 7 and 8 and provides germane conclusions for the MFI sector.

1.6 Conclusion

The corporate governance - performance link is not a new research topic but there is much to learn because the impact of corporate governance on MFI performance has been under-emphasised. There is no substantive work using multiple MFI outcomes over a number of years that has been previously undertaken for South Asian countries. This lack of scholarly work is in part attributable to a preference for corporate governance studies to be directed towards for-profit companies in mature and emerging markets. Which corporate governance practices can help in promoting MFI sustainability and outreach among low-income people have not been investigated, especially in emerging countries such as Sri Lanka and India. Prior studies have also indicated unsuccessful implementation of corporate governance practices, but have not given weight to country-specific characteristics, which to date have not been well researched. It is hoped that this research will contribute to further development of corporate governance practices by offering useful lessons on how to improve MFI financial performance and outreach with better governance.

CHAPTER TWO

BACKGROUND OF MICROFINANCE INDUSTRY

2.1 Introduction

The microfinance industry serves as an important provider of credit to poor and low income people who seek small amounts of money with little or no assets to offer as collateral. World Bank (2012a) data indicates 40% of the world's population live with less than USD 2⁵ per day. In developing nations around the world, MFIs are seen to play a significant role in eradicating poverty (Caudill et al., 2009; Zohir & Matin, 2004) as they can help low-income people by allocating resources and providing consultation to assist them with the aim to improve their standard of living (Helms, 2006). Public media has also extensively commented on microfinance as an important instrument to combat extreme poverty in some nations (Hermes & Lensink, 2007). This promotes a need to determine frameworks for MFIs that promote sustained long-term services to underprivileged people (Mersland, 2009).

Millions of people live without access to financial services and the demand for these services far exceeds the currently available supply. According to Sinclair (2012), the gap between demand and supply is known as the "missing middle." This gap has arisen not due to the shortage of funds in the formal financial sector but due to lending to poor people, resulting in high transaction costs, moral hazards and high risk (Stiglitz & Weiss, 1981). Most of the formal banking sector and capital market systems in developing countries focus on people who are already have wealth and are better established (Daley-Harris, 2006; Wang, 2007).

The formal banking sector only serves around 20% of the world's population (Berenbach & Churchill, 1997; Robinson, 2001). Due to the lack of contribution by

⁵ USD 2 is the median poverty line for developing countries which is higher than the average rate of USD 1.25 a day. According to Chen and Ravallion (2008), there are five international poverty lines. The lowest of these was USD 1.00 a day at 2005 prices, which is very close to India's official poverty line. The next lowest was USD 1.25 a day, which is the average line of the poorest 15 countries. The highest was USD 2.50 a day, which is the median of all countries except the poorest 15 countries.

the formal banking sector to low income people, MFIs have a great chance to play a significant role at macro level to eradicate poverty in developing countries (Caudill et al., 2009; Helms, 2006; Zohir & Matin, 2004). Significant impacts on the living standards of millions of people who are usually unable to access financial services may be achieved through improvements in the performance of MFIs (Brau et al., 2009; Hermes & Lensink, 2007). It is important to understand the role of microfinance activities for economic growth and the regulatory and supervisory framework imposed by governments for MFIs. This chapter explains the history of MFI activities, definitions, growth and size of microfinance activities and the regulatory framework of different types of institutions in Sri Lanka and India.

2.2 History of Microfinance Activities

Small scale or local level self-help finance has been practised for years and has a long history (Helms, 2006) due to the importance of providing financial services to unbanked people in the world (Sinha, 2009). Group credits, moneylenders and informal small savings have been operating for many centuries across the world. Ardener (1964) and Khanka (2010) stated that informal microcredit and savings programmes have existed in many countries under different names, such as “susu” in Ghana, “chit funds” and “arisan” in India, “tandas” in Mexico, “tontines” in West Africa and “cheetu” in Sri Lanka. The success and survival of various microcredit programmes have encouraged an expansion of geographically and regulatory frameworks and seen them embraced by the formal sector (Sinha, 2009). However, there has been very little study undertaking regarding the informal microcredit history due to the lack of documentary evidence.

In the early 15th century Europe, the Catholic Church founded pawn shops as a substitute for moneylenders who were charging high interest rates from low income people. Throughout the century these types of shops became popular and numerous in urban areas across Europe (Helms, 2006). Formal financial institutions that provide microcredit and savings for the low income people, normally ignored by commercial banks, have also been around for generations in Europe. By the 18th century, the micro-bank development had begun in Europe (Robinson, 2002). In 1778, the savings banks model began in Germany and spread widely into many

European countries in early 19th Century. The first saving bank was established in Prussia (Germany) with the objective of supporting the poor people. In the 1850s, two regions of Germany established financial co-operative banks and aimed to improve the welfare of rural people as they had been highly dependent on usurious moneylenders (Helms, 2006).

In the mid-1800s, American political philosopher Lysander Spooner expressed the benefits of giving small credits to entrepreneurs and farmers who did not have their own capital to start their own businesses. He saw this process as a way to get people out of poverty. This concept made a big impact after the end of World War II with the Marshall Plan which provided monetary support to rebuild European economies. Microcredit activities were distinctly seen in late 18th century when Jonathan Swift inspired the Irish Loan Fund system and provided small loans to poor traders (Helms, 2006; Robinson, 2002). This model was extensively copied by the other wealthy individuals (Robinson, 2002) and activity expanded to middle Europe in the first half of the 19th century.

The Dutch Colonial administrators had introduced several forms of People's Credit Banks in Indonesia, and they became the largest microfinance system in Indonesia in 1895. Most of these new banks were owned by the government agencies or private banks. Many rural savings and credit themes appeared in the early 1900s in Latin America and were aimed to modernise the agriculture sector. During the period 1950 to 1970, the focus was on providing agricultural loans to small and marginalised farmers with the intention of increasing their productivity and income (Helms, 2006). In this era, the formal microcredit sector began in various ways, resulting in more formal savings and credit institutions for the urban and rural people (Srnc & Svobodová, 2009). These institutions were established as People's Banks, Credit Unions, Savings and Credit Co-operatives and generated many different forms of microcredit and savings methods to the finance industry. According to Sengupta and Aubuchon (2008), the 1980s were the turning point in the history of microfinance due to the introduction of new lending approaches that mainly emerged among registered non-governmental organisations (NGOs) and in banks with special charters, such as the Grameen Bank in Bangladesh, BancoSol in Bolivia and the village banks of Bank Rakyat Indonesia. These institutions are now commonly referred to as MFIs.

Many important personalities need to be merited in the subsequent upturn of the microfinance industry. The founder of the Grameen Bank of Bangladesh, the economics professor Muhammad Yunus, is the pioneer of microfinance who targeted poor people with the goal of lending mainly to women (Yunus, 2007). In 2006, he was awarded the Nobel Peace Prize for his efforts to reduce poverty in Bangladesh (Sengupta & Aubuchon, 2008). The Grameen Bank, regarded as the foremost bank of its kind to offer microcredits to the poor, confirms that not only are the poor creditworthy, but also their repayment rates are better than customers of traditional commercial banks (Yunus, 2007).

Others who have contributed to the progress of the microfinance sector are Akhtar Hameed Khan (social scientist) who pioneered microcredit and microfinance initiatives by promoting participatory rural development through Rural Support Programmes in Pakistan (Srnc & Svobodová, 2009); John Keith Hatch (an American economic development expert) pioneered modern day microfinance and is regarded as the founder of the Foundation for International Community Assistance and Rural Development Services. He is well known for innovating village banking. In the early stages of MFIs, many new innovations entered the sector with a new wave of microfinance initiatives and numerous groundbreaking enterprises beginning to investigate ways to provide loans to poor people.

2.3 Definitions for Microfinance and MFIs

Over the last two decades, the microfinance field has grown from a narrow concept of microenterprise credit to more comprehensive concept of microfinance. This microfinance concept includes a range of services for low income people, such as savings, money transfer and insurance in addition to microcredits (Helms, 2006). Current interest in microfinance activities stems from the Microcredit Summit held on 2 - 4 February, 1997. Microfinance was formally defined at the summit as a programme that extends small loans to very low income people for their self-employment projects, allowing them to care for themselves and their families.

Definitions of microfinance naturally differ from country to country as there is no universally accepted definition. Important criteria used to define microfinance at the Microcredit Summit include:

- Size - loans are micro or very small in size
- Target users – micro entrepreneurs and low income households
- Utilisation - the use of funds for income generation and enterprise development, but also for community use (health, education and consumption)
- Terms and conditions - most terms and conditions for microfinance loans are flexible and easy to understand, and are suited to the local conditions of the community

The Asian Development Bank (ADB) defined microfinance as “the provision of a broad range of financial services as deposits, loans, payment services, money transfers and insurance to poor and low income households and their microenterprises” (2000, p. 2).

Robinson (2001, p. 9) defines microfinance in an extensive way as,

“small-scale financial services – primarily credit and savings - provided to people who farm or fish or herd; who operate small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land vehicles, draft animals, or machinery and tools; and to other individuals and groups at the local levels of developing countries, both rural and urban”.

Burkett and Sheehan (2009, p. 2) define microfinance in the Australian context as,

“a set of tools, approaches and strategies addressing the needs of people who are financially excluded. Microfinance offers low-income people access to basic financial services such as small loans, savings, insurance, bill-payment and money-transfer facilities, superannuation and financial advice. Microfinance seeks to provide fair, safe and ethical financial services for people who [...] are not able to access mainstream financial services. Its purpose is to alleviate and eliminate poverty”.

They have excluded the exploitative, predatory or unfair lenders in the definition.

Hudon (2008, p. 3) stated that the task force on microfinance in India defined microfinance as the “provision of thrift, credit and other financial services and

products of very small amounts to the poor (mostly women) to enable them to raise their income and improve their living standards”. Some people argued that microfinance loans needed to provide only for income-generating activities, but the Centre for Microfinance of borrowers in Hyderabad states that “Microfinance is useful in smoothening consumption and relieving seasonal liquidity crises that visit poor families and that it obviates the need for high-cost borrowing from informal sources” (RBI, 2011, p. 6). Based on the recommendations of the Malegam Committee (a sub-committee of the Central Board of Directors of RBI) report, a separate category of NBFC-MFIs has been created to encourage the growth of the microfinance sector with an appropriate legal framework. Accordingly, NBFC-MFIs defined as:

“a company (other than a company licensed under Section 25 of the Companies Act, 1956) which provides financial services predominantly to low-income borrowers with loans of small amounts, for short-terms, on unsecured basis, mainly for income-generating activities, with repayment schedules which are more frequent than those normally stipulated by commercial banks and which further conforms to the regulations specified in that behalf” (RBI, 2011, p. 5).

Section 40 of the Draft Legal Framework for the Regulation and Supervision of Microfinance Institutions in Sri Lanka 2015 (p. 16) describes the microfinance business as “accepting deposits and providing financial accommodation in any form; other financial services; or financial accommodation in any form and other financial services, mainly to low income persons and microenterprises”.

2.4 Development of Microfinance Activities in the World

Modern microfinance has its roots in the 1970s. Srnec and Svobodová (2009), indicate that development of MFIs can be divided into four phases: expansion (1970 - 1980), growth (1980 - 1990), commercialisation (1990 - 2000) and transformation secularisation (2000 - present). During the expansion period, MFIs spread mostly in developing countries and those institutions did not consider profitability; they focussed solely on poverty reduction. People had much enthusiasm for MFIs that were characteristically self-sustaining, self-expanding and self-perpetuating. More informal types of MFIs, such as voluntary groups, were established to help change

the living standards of people who were unable to sustain themselves with basic needs. During this period, microcredit was generated through group lending methods and village banking methods.

The growth period of MFIs was characterised by different types of MFIs which had significant financial dualism due to the coexistence of formal and informal MFIs. Even when formal MFIs dominated the municipal environment, they could not access the low income clients who were living in the municipal area due to their lack of familiarity with the needs of low income people. The informal sector was more wide-spread in rural areas but it was not quite transparent. Financial relationships were mainly based on historical, tribal, familiar and traditional relationships and the principle of these relationships was honour and promise. Formal MFIs had larger scope and were governed and controlled by the given public institutions with rapid growth in the number of served clients.

Continuous growth of microfinance activities and the acceleration of transformation of informal MFIs to formal MFIs were the characteristics of the period of commercialisation in 1990-2000. Many organisations dealing with MFI activities accelerated the transformation, e.g. UNITUS⁶ in the USA. During this period, microcredit experienced considerable support from NGOs, governmental organisations and rapid growth in the number of served clients.

During the transformation secularisation period (year 2000 onwards), microfinance created financial markets by attracting small- and medium- sized investors. This created a rapid rise in the entry of financial investors into financial markets in poor countries and led to increased interest rates in the sector. The rapid early growth of the microfinance movement primarily consisted of non-profit, socially motivated lenders seeking to reach as many low income clients with credit. Later they demonstrated that through the use of new lending technologies, such as joint liability contracts and dynamic incentives, a substantial portion of this new market could in fact be lent to profitably. This realisation has drawn profit-motivated lending institutions into these markets. With the growth of microfinance activities

⁶ UNITUS is a donor organisation which provides donations to worthy NGOs worldwide. Currently it leverages the Unitus Acceleration Model to partner with 23 MFIs in India, Southeast Asia, South/Latin America and East Africa to deliver quality microfinance service to poor people.

in developing countries financial regulators suggested the need to frame policies to be integrated with some of the MFIs in order to regulate the financial services (Sinha, 2009).

The widespread enthusiasm for microcredit generated a dramatic increase in the microfinance activities in developing countries. In 1997, the Micro Credit Summit boosted awareness of MFIs as an initial step of a decade-long campaign to provide credit to 100 million of the world's poorest families to enable them to become self-employed and thereby move away from poverty (Daley-Harris, 2006). The year 2005 marked a turning point for MFIs with the announcement of the International Year of Microcredit by the Economic and Social Council of the UN and the award in 2006 of the Nobel Peace Prize to Mohammed Yunus for his Grameen Bank concept (Hermes & Lensink, 2007; Viada & Gaul, 2012). According to the Consultative Group to Assist the Poor (CGAP, 2010), there is a plan for further expansion of microfinance activities as they contribute to mitigating poverty and assist in the development process of a country. Possibly, there is more extensive support for microfinance today than any other single tool for fighting world poverty. McIntosh and Wydick (2005) found that activities of the microfinance movement have been both admired and sustained by a broad range of academic scholars and major development finance institutions such as the World Bank development practitioners and donors.

Based on microfinance activities, microfinance providers can be divided into four general categories (Helms, 2006, pp. 35-57).

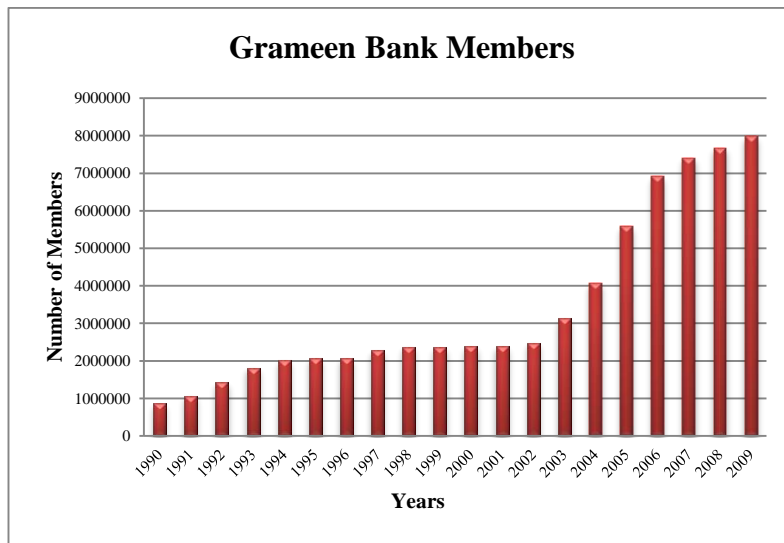
1. Informal financial service providers – The informal sector is considered to be unorganised with non-institutional entities that transmit traditional, retail and subsistence socioeconomic services directly to poor and low-income clients. This sector comprises moneylenders, pawnbrokers, savings/deposit collectors, money-guards, Rotating Savings and Credit Associations (ROSCAs) and Accumulating Savings and Credit Associations with friends and neighbours. These providers live in the same community and know each other very well, so they can provide money in a very flexible, convenient and fast manner.

2. Member-owned organisations – These organisations include self-help groups (SHGs), credit unions, savings and credit co-operative, Financial Service Associations and Self-Managed Village Savings and Credit Banks. Similar to the informal sector, these organisations are also small, local and viable financial service providers with low transaction costs and offer convenient and flexible credits for their members. These organisations commonly rely on the savings of members as their main source of funds and group into federations at regional or national level.
3. NGOs – Since the mid-1980s, NGOs have conducted their activities and are the true pioneers of the microfinance sector as they emerged with the objective to serve the poor people. Some NGOs are highly dedicated to microfinance activities, while other NGOs provide microfinance as an additional service with their range of other services. NGOs can be fully local or associated with international networks. Due to growth constraints, some leading NGOs are performing in a commercial way.
4. Formal financial intuitions – Formal financial institutions are identified as those institutions which are monitored and supervised under the accepted rules and regulations imposed by the government. Formal institutions consist of government-owned agricultural, development, savings and postal banks, private commercial banks and non-banking financial institutions (NBFIs) and rural or community banks. These institutions offer a wide range of financial services through branches which are spread across the country and internationally.

2.5 Market Size of MFIs

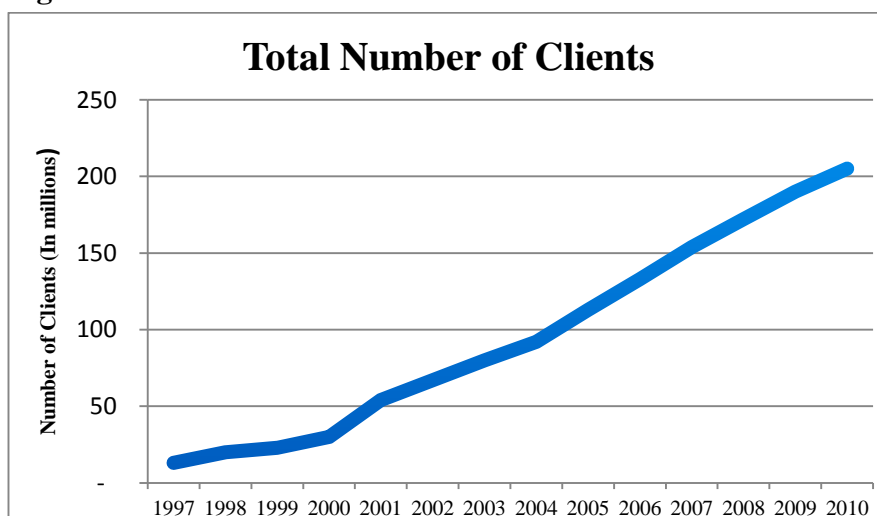
Since the beginning of the Grameen Bank, microfinance has grown significantly on all continents and in numerous countries. By 2005, the Grameen Bank had experienced high growth rates and disbursed more than USD 5 billion loans to around five million borrowers in which more than 96% were women. Figure 2.5-1 shows membership of Grameen Bank has grown by 817% from 0.9 million members in 1990 to 8 million members in 2009.

Figure 2.5-1: Grameen Bank Membership



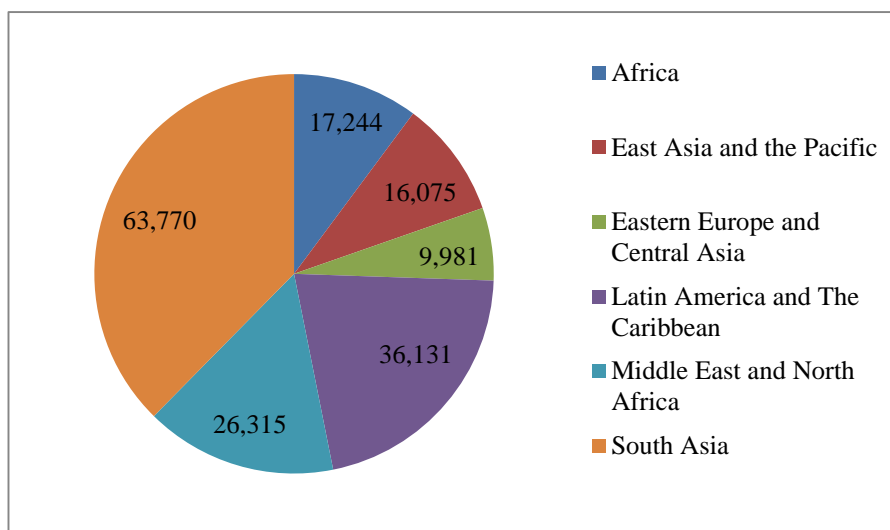
The Grameen Bank concept has also expanded to Bolivia, Chile, China, Ethiopia, Honduras, India, Malaysia, Mali, Philippines, Sri Lanka, Tanzania, Thailand, United States and Vietnam. According to the State of the Microcredit Summit Campaign Report 2012 (Maes & Reed, 2012), the total number of microfinance clients in the world grew by 15 times (13 million to 205 million) from 1997 to 2010 (See Figure 2.5-2), which is the latest aggregate data available. However, the number of people MFIs serve is only small compared to the amount of people in need of such services in the world (CGAP, 2006; Ivatury & Reille, 2004).

Figure 2.5-2: Client Growth



The Microfinance Global Valuation Survey (CGAP, 2010) shows that the level of poverty in some countries (such as Cambodia, India, Bangladesh and the Philippines) has reduced due to an increase in the number of MFIs in these countries. According to Daley-Harris (2009), the number of MFIs in the world increased from 618 to 3,552 from 1997 to 2007. It is estimated that around 10,000 microfinance programmes existed in 2007 in the world (Ming-Yee, 2007), serving over 100 million clients. The recent available estimations show that 1,000 to 2,500 MFIs have served 67.6 million clients in more than 100 countries (Sengupta & Aubuchon, 2008). Figure 2.5-3 presents the median value of numbers of customers per institution served by each region in 2014⁷. The highest value is represented by the South Asian region followed by the Middle East and North Africa.

Figure 2.5-3: Number of Active Borrowers (median) per Institute by Region - 2014



The growth of foreign capital investment (both debt and equity) more than tripled to USD 4 billion (Reille & Forster, 2008) between 2004 and 2006. In 2010, it reached USD 13 billion, indicating that interest in MFIs is growing tremendously. Ivatury and Reille (2004) stated that nearly 90% of USD 1.1 billion of total microfinance investments received in 2003/4 came from governments, donors, and

⁷ Microfinance Information Exchange Network; www.mixmarket.org.

multilateral agencies⁸. Although funds provided by governments and donors have increased over the years, evidence shows that most MFIs are faced with significant financial turbulence and uncertainty. As a result, the number of MFIs operating in many countries has declined over the years. According to the MicroBanking Bulletin (autumn 2007) survey based on the MIX 2006 dataset of 704 MFIs, almost 41% of MFIs are not financially self-sustainable and are dependent on donor support to keep afloat (Mersland & Strøm, 2010).

Accountability and transparency of donated funds are the important areas where MFIs need to improve. MFIs need good financial and management practices to operate their micro-financing activities more transparently and sustainably (Caudill et al., 2009). According to Otero (2005), investors are now turning their attention to the characteristics of the management structures and the quality of MFIs' governing bodies. Any MFI that neglects adequate control and monitoring may suffer loss of reputation and face increased challenges in terms of achieving a sustainable position in the industry (Caudill et al., 2009; Hartarska & Nadolnyak, 2007; Lapenu & Pierret, 2006).

2.6 Microfinance in Sri Lanka and India

This section provides background information relating to MFI activities in Sri Lanka and India. In addition to the structural evolution of MFIs in Sri Lanka and India, this study also provides information regarding the number of clients they serve, different types of organisational settings and their existing supervisory and regulatory requirements.

⁸ Multilateral agencies include International Financial Institutions, World Bank, UN and they have provided six times more funds for MFIs than bilateral donors.

2.6.1 Microfinance in Sri Lanka

2.6.1.1 Evolution of MFIs in Sri Lanka

GTZ-ProMiS (2010)⁹ stated that the microfinance movement in Sri Lanka began in 1906 with the establishment of Thrift and Credit Co-operative Societies (TCCSs) during the British ruling period. Due to the growing number of TCCSs, the Co-operative Societies Ordinance No.7 of 1911 was enacted to provide guidance and observation. The Dumbara Co-operative Credit Society was the first co-operative enacted in 1911 with the registration of the ordinance. These TCCSs fulfilled a wider role during the early decades of the 20th century, also being involved in procurement of inputs and distribution of products. The role was eventually taken over by the Multi-Purpose Co-operative Societies (MPCSs) which were first established during the 1940s as Consumer Co-operative Societies and were later renamed MPCs in the 1950s (SAMN, 2010).

The Country-Level Effectiveness and Accountability Review in Sri Lanka (Duflos, Ledgerwood, Helms, & Moyart, 2006) observes that the network of TCCSs was weak and had declined by the late 1970s. However, TCCSs have been re-organised under a new name, “SANASA¹⁰”. The SANASA TCCSs are member-owned societies, grouped together as a federation but coming under the purview of the Department of Co-operative Development (DCD), which was established in 1930. Parallel to the SANASA TCCSs, the MPCs and Co-operative Rural Banks (CRBs) also fall under the purview of the DCD (Modoran & Grashof, 2009).

GTZ-ProMiS (2010) indicates that by the late 1980s and early 1990s several local and international NGOs entered the microfinance business. Many of these NGO-MFIs initially combined their microfinance activities with other social and community development activities. However, more recently, the trend has been to separate the microfinance and non-microfinance activities of some of these

⁹ GTZ-ProMiS is a microfinance sector promotion programme (ProMiS) implemented by the Sri Lankan Ministry of Finance and Planning in partnership with the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) on behalf of the German Federal Ministry for Economic Cooperation and Development.

¹⁰ SANASA is a specialised bank having the majority shareholding with the primary societies and the district unions and provides loans direct to qualified primary societies.

institutions due to the fact that operation of microcredit activities is completely different from charitable activities. Through this period, the Sri Lankan government established 17 Regional Rural Development Banks (RRDBs) by enacting the Regional Rural Development Banking Act, no 15 of 1985. These institutions were given the task of reaching remote rural areas and smallholders who lacked access to financial services from commercial banks (Modoran & Grashof, 2009). However, their success was limited by internal structural weaknesses and excessive geographical fragmentation. In addition, the RRDBs lacked sound lending and monitoring policies, and operations were difficult to improve and standardise.

A significant restructuring and recapitalisation took place in 1998-1999 and the 17 state-dominated RRDBs were amalgamated into six independent Regional Development Banks (RDBs) with more autonomous management, a broader ownership base and board members appointed by shareholders (SAMN, 2010). The intention was to create more professional operations and improve viability and sustainability. However, it is unlikely to be a viable institutional form for NGO-MFIs which yearn for formal status in the industry. In May 2010, under a new parliamentary Act of Pradeshiya Sanwardana Bank Act No.41 of 2008 (amended by No.30 of 2011), the six RDBs were merged into a single RDB. It was expected that the mergers would result in reduced costs and improve operating efficiency. As a large nationwide entity, the new bank is also expected to be more successful in securing credit lines from international funding agencies (GTZ-ProMiS, 2010) for the development of regional infrastructure and small and medium enterprises (SMEs).

2.6.1.2 Role of formal financial institutions in the microfinance sector

Competition in the microfinance sector has encouraged financial deepening as formal financial institutions seek to reach lower income clients. An emerging trend is the entry of commercial banks, Registered Finance Companies (RFCs) and other large corporate entities into the microfinance business (Duflos et al., 2006). The microfinance industry report of Sri Lanka (GTZ-ProMiS, 2010) indicates that Hatton National Bank's "Gami Pubuduwa" ("Village Awakening") microfinance programme is probably the oldest microfinance programme among the licensed

commercial banks, having been established in 1989. The Gami Pubuduwa loan portfolio stands at Sri Lankan Rupees (LKR) 2.0 billion reaching 15,000 micro entrepreneurs across the country. According to the Duflos et al. (2006), among all Sri Lankan RFCs, Lanka Orix Leasing Company Micro Credit (LOMC), which is a partnership of the local Lanka Orix Leasing Company (LOLC) and FMO¹¹ of the Netherlands was the first company that has provided financial services to the low-income population. Since its entry into the microfinance business in 2003, LOMC has grown to reach a loan portfolio of LKR 3.2 billion serving a client base of close to 23,000 through a network of service centres located in post offices and fuel stations. This has been followed by the establishment of several other RFCs such as Alliance Finance Company, Arpico Finance Company, Bimputh Finance Company, Chilaw Finance Limited etc. However, for many formal financial institutions, their entry into microfinance is more a corporate social responsibility (CSR) or image building activity.

2.6.1.3 Government involvement in the microfinance sector

The Government of Sri Lanka is playing a key role in strengthening the regulatory and supervisory framework for financial services and in the delivery of microfinance services to the low-income people. Various government initiatives in the microfinance sector have been implemented from time to time. Approximately, 65% of microcredit in Sri Lanka is provided through the government. The Samurdhi Development Programme, which was introduced in 1995, replacing the previous Janasaviya Programme, is the largest microfinance programme in Sri Lanka (Modoran & Grashof, 2009) and is the government's poverty alleviation program, targeting the low-income population. It covers nearly 50% of total households. GTZ-ProMiS (2010) states the programme is administered under the Samurdhi Authority of Sri Lanka, under the Ministry of Samurthi, Agriculture, and Livestock, but is essentially self-supervised. Samurdhi Bank Societies (SBSs) are the government's main subsidised institutions established in 1996 as a part of the

¹¹ FMO (Dutch word) is known as the Netherlands Development Finance Company and it is the international development bank of the Netherlands. It invests money for private sector projects in developing countries and emerging markets.

Samurdhi Programme. In July 2007, there were around 1,038 SBSs in Sri Lanka (SAMN, 2010), which account for more than 5 million depositors and almost 500,000 borrowers. Further the state-owned RDBs have a combined market share of around 18% and a broad customer base, especially in agriculture, livestock, small industries, and trade (ADB, 2012).

2.6.1.4 Growth and challenges for prevailing MFIs

Following the tsunami which struck Sri Lanka in 2004, there was an influx of foreign aid to the country and a substantial amount was channelled to the microfinance sector. While many donors worked through established MFIs, some funded the establishment of multi-sectorial livelihood programmes which include microfinance components. These were largely unsustainable in the long-term and had some detrimental impacts on the sector in the short-term through their mix of grants and subsidised loans, resulting in damage to the established credit culture. GTZ-ProMiS (2010) shows that regional MFIs such as BRAC Bangladesh¹² also entered the sector after the tsunami and rapidly scaled up to become a significant player among NGO-MFIs. BRAC's operations in Sri Lanka had an outreach of 100,000 microfinance clients by the end of 2009, less than five years after its entry into the sector.

A report into the state of microfinance in Sri Lanka prepared by Institute of Microfinance¹³ states that there were about 1,061,457 active borrowers in 2008 in 20 key MFIs, compared to 981,724 in 2006 from the same 20 MFIs. In terms of portfolio growth, the total outstanding loan balance was around LKR 18 billion (USD 157 million) in 2008 which is around a LKR 6 billion (USD 52 million) increase compared with 2006. Growth indicators for a sample of institutions (not including CRBs and SBSs), mainly comprised of key NGO-MFI players, show that

¹² BRAC Bangladesh is a development organisation founded in Bangladesh in 1972, dedicated to poverty alleviation.

¹³ Institute of Microfinance is a non-profit organisation which conducts research and training needs for national as well as for global microcredit and poverty reduction programmes.

the number of active clients is growing. The growth will continue with the expansion of microfinance activities in North and East Sri Lanka.

Absence of a cohesive regulatory and supervisory system for the microfinance sector has in recent years become a barrier to growth of the sector (Modoran & Grashof, 2009). Normally, the formal MFIs are regulated by the banking and non-banking regulations. But this does not apply for semi-formal institutions, especially the NGO-MFIs, which receive substantial donor support for their operations. Presumably the formal sector regulations are effective than the semi-formal and informal sector, in terms of internal controls, governance and ownership structure (Haq, Hoque, & Pathan, 2008). Therefore, it is important to have a sensible regulatory framework for MFIs in Sri Lanka, similar to the banking industry.

In the Sri Lankan microfinance sector, funding has become a key issue, especially for NGO-MFIs, which are currently not authorised to accept public deposits and are further restricted from obtaining off-shore debt and equity funding under prevailing exchange control restrictions. CGAP (2010) shows that accessing domestic funding is also an issue, as local banks and other funding agencies are still reluctant to lend to or invest in the microfinance sector due to the perception of high risk. In these circumstances, both the government and microfinance practitioners have come to recognise the need for an appropriate regulatory and supervisory mechanism for the sector. As a result, a draft legal framework for the regulation and supervision of MFIs has been submitted to the government by LMFPA in 2015.

2.6.1.5 The financial sector of Sri Lanka

The financial system of Sri Lanka consists of financial institutions such as the Central Bank of Sri Lanka (CBSL), Licensed Commercial Banks (LCBs), Licensed Specialised Banks (LSBs), RFCs, Specialised Leasing Companies (SLCs), Insurance Companies (IC), unit trusts, merchant banks, venture capital companies, authorised primary dealers, stock brokers and dealers, and contractual savings institutions such as the Employees' Provident Fund and the Employees' Trust Fund. These are operated within formal financial markets (e.g. the bond market, foreign exchange market, money market and equity markets) and supported by financial infrastructure containing payment and settlement systems. In addition, there are

number of rural banks, TCCSs, pawnbrokers and MFIs. Further, there are a large number of moneylenders and ROSCAs.

The apex financial institution in the banking sector in Sri Lanka is the CBSL, which is responsible for supervision and examination of banks and the financial sector in Sri Lanka. It operates under the provisions of Monetary Law Act No 58 of 1949 which determines the functions of, confers powers, and imposes responsibilities upon the Monetary Board of the CBSL. Among 24 LCBs, two were owned by the government in 2012. Of the remaining LCBs, nine are owned locally and 13 are owned by foreign banks. The number of LSBs declined from 14 to nine during the period 2007 to 2012 and currently they are engaging in more narrowly defined functions which means they are not allowed to offer current accounts to customers, but are allowed to offer savings accounts. However, during the period 2007 to 2012 the RFCs have increased from 31 to 45¹⁴. RFCs are permitted by the CBSL to accept public deposits, whereas SLCs can raise funds from the public by issuing debt securities and usually they are attached to banks or finance companies to meet their funding requirements.

2.6.1.6 Types of MFIs in Sri Lanka

There are various categories of MFIs operating under different regulation and ownership in Sri Lanka, such as banks, finance companies, guarantee companies, co-operatives, NGO-MFIs (GTZ-ProMiS, 2010). Classification of MFIs leads to a focus on the nature of MFIs so that the researcher investigates the different regulatory requirements applicable for each and every classification of MFI (See Figure 2.6-1). As per the CGAP (2006), all the MFIs in Sri Lanka are broadly categorised into three sectors;

1.) Formal microfinance sector

This sector comprises the LCBs, LSBs, RFCs, SLCs, SBSs and ICs. LCBs, LSBs, RFCs and SLCs are under the regulation and supervision of the CBSL. Among the 24 LCBs, nearly six banks provide finance to low-income people in Sri Lanka. The

¹⁴ See http://www.cbsl.gov.lk/htm/english/05_fss/popup/registered_fc.htm.

more significant players in LCBs are the government-owned People's Bank and the privately owned HNB and Commercial Bank. The RDB caters to the higher end of the microfinance market and the SME sector. The RDB and SDB are the only LSBs with a focus on microfinance. RFCs such as LOMC, Alliance Finance Company, Arpico Finance Company, Bimputh Finance Company and Chilaw Finance Limited, etc, are engaged in the microfinance activities.

2.) Semi-formal microfinance sector

This sector comprises the 1,608 CRBs, more than 7,400 TCCSs, SANASA Societies (SSs) and NGOs. CRBs, TCCSs and SSs are member-owned societies and are permitted to mobilise savings which they use to fund credit facilities but they can take savings from the public only. CRB branches are associated with MPCSSs, but their performance has been hindered by weak governance of MPCSSs. TCCSs are setup by the SANASA movement and they have access to the SDB.

Enormous local and international NGOs are involved in microfinance activities, while some are now operating their microfinance activities separately from their other operations (SAMN, 2010). NGO-MFIs in Sri Lanka operate in a grey area as their microfinance activities are neither governed nor supervised by any specific regulation. Some NGO-MFIs are registered with the Department of Social Services or established as limited by guarantee companies or private companies, initially under the Companies Act No. 17 of 1982 and subsequently required by law to register under new Company Act No. 7 of 2007.

3.) Informal sector /non-institutional suppliers

Funeral societies, savings associations, credit associations, traders, and moneylenders are the main categories of this section. ROSCAs, which are commonly known as "Cheetu", are the popular method of informal money supplies in Sri Lanka. Similar to most of other countries, Sri Lanka also has moneylenders who provide credit to low-income people at usury rates (more than 20% per month) and pawnshops that are conducting their financial services under the informal sector. This study does not consider this category for data collection.

Figure 2.6-1: Categories of MFIs in Sri Lanka



2.6.1.7 Regulatory framework of MFIs

The term ‘regulation’ refers to the different laws in Sri Lanka that precisely deal with microfinance organisations, whereas the term ‘regulated’ refers to the institutions that are under the supervision of CBSL (Atapattu, 2009). Different types of MFIs exist as legal entities because they are registered under various types of laws, however, there is no any specific regulatory or supervisory authority to regulate or monitor MFI activities. Some institutions are regulated by many authorities and some may not have any regulation at all. The scope of the regulations is presented in Appendix 01.

2.6.2 Microfinance in India

2.6.2.1 Evolution of MFIs in India

The microfinance industry in India has been progressing for many years. The SAMN (2010) stated that the evolution of the Indian microfinance sector can be broadly categorised into four segments based on various time dimensions: the co-operative movement (1900–1960); subsidised social banking (1960–1990); SHG Bank linkage programme (SHG-BLP) and growth of NGO–MFIs (1990–2000); and Commercialisation of microfinance (after 2000).

During the co-operative movement, credit co-operatives were recognised and established a vast network of rural co-operative credit banks in the 1950s (Basu & Srivastava, 2005) under government sponsorship. Co-operatives did not receive continuous government funding from the national budget so they raised funds by themselves or borrowed money from commercial banks at competitive interest rates. In early 1960, many co-operatives failed and it affected the credit flow of agriculture and small industry (Mohan & Prasad, 2005, p. 26).

With the failure of co-operatives, the Indian government and state provinces focused on nationalisation of commercial banks (Zhang & Wong, 2014), expansion of rural branch networks, establishment of Regional Rural Banks (RRBs) and the setting up of the Apex¹⁵ institutions. This was the era between 1960 and 1990 and the concept was known as subsidised social banking, which exerted the social objectives rather than commercial purpose or profitability (Mohan & Prasad, 2005, p. 26). This 30-year period was characterised by large scale misuse of credit which created a negative perception about the credibility of micro borrowers among bankers, which further hindered access to banking services (Basu & Srivastava, 2005).

The SHG-BLP and the NGO-MFIs became effective during 1990 to 2000 (Zhang & Wong, 2014) due to the failure of subsidised social banking and increased competition in the banking sector (Basu & Srivastava, 2005). The failure created a paradigm shift in delivery of rural credit with the National Bank for Agriculture and Rural Development (NABARD)¹⁶ forming the SHG-BLP, aiming to connect informal women's groups to formal banks (Sinha, 2009). The programme helped to increase the banking system among low income people, unbanked people, and initiated a change in the banks' outlook towards low-income families from beneficiaries to customers (Kumar & Sahoo, 2011).

Commercialisation of microfinance became a key concept in the first decade of the new millennium reforms (Zhang & Wong, 2014). NGO-MFIs increasingly began transforming themselves into more regulated legal entities, such as NBFCs, to attract commercial investment (Srinivasan, 2010; Zhang & Wong, 2014) and mobilise deposits (Basu & Srivastava, 2005). MFIs set up after 2000 observed themselves less in the developmental model and more as businesses in the financial services space, catering to an untapped market segment while creating value for their shareholders (Sriram & Rajesh, 2004). On September 28, 2006, the RBI arranged broad guidelines on fair practices that are framed and approved by the

¹⁵ An Apex institution is a second-tier or wholesale organisation that channels funding (grants, loans, guarantees) to multiple MFIs in single country or region. Funding may be provided with or without supporting technical service (Basu & Srivastava, 2005; Mohan & Prasad, 2005; Tsai, 2004).

¹⁶ NABARD is a specialised country-level rural credit agency which was established in 1982.

boards of directors of all NBFCs. This guidelines state that relevant provisions of fair practices to be incorporated in the Customer Protection Code that NBFC-MFIs should adopt (RBI, 2011, p. 23).

2.6.2.2 Role of formal financial institutions in the microfinance sector

Competition in the banking sector has encouraged financial deepening as formal financial institutions seek to reach lower income clients. There has been an emergence of a new generation of private sector banks, such as ICICI bank, UTI bank and HDFC bank, which have become important players in the microfinance sector. In one notable example, the ICICI¹⁷ bank has shown a great interest in entering the rural financial sector in India and introduced new approaches, and financial products to the rural market (Basu & Srivastava, 2005).

On the other hand, commercial banks along with government Apex institutions have been the major sources of debt funding to Indian MFIs. As per RBI regulations in India, domestic and foreign commercial banks were required to lend 40% and 32% of funds respectively to the priority sectors and lending to microfinance qualifies as priority sector lending (RBI, 2011). As of March 2009, banks and financing institutions had a total exposure to MFIs of USD 2.45 billion. This represents an almost 150% increase from the exposure in March 2008. Consequently, as at 31 March 2010, the total funds given by banks and financial institutions was USD 3.11 billion. However, to the RBI (2011), this is not a significant amount. There has been a rise in non-traditional products such as non-convertible debentures, securitisations and portfolio buyouts available to MFIs through domestic as well as foreign debt funds. As a result, today, larger MFIs have adequate and easy access to debt financing. However, smaller and emerging MFIs are still struggling to find adequate funds as they have unproven business models and present a higher default risk to banks. Alternative debt providers are emerging

¹⁷ ICICI bank is the second largest private commercial bank in India. ICICI utilises a new approach called a partnership model which allows several hundred MFIs to partner with ICICI bank by functioning as an agent for the bank. It provides funds to partner MFIs for their lending operations.

in an attempt to fill this gap with subordinated-debt, guarantees and pooled securitisations.

2.6.2.3 Government involvement in the microfinance sector

The Indian government is playing a key role in strengthening the regulatory and supervisory framework for financial services and in the delivery of microfinance services to low-income people (Basu & Srivastava, 2005). In 1995, the Indian government established Rural Infrastructure Development Fund in NABARD as a solution for the shortfall in providing funds by the commercial banks to priority sector lending (RBI, 2012b). In order to provide access to credit, the Indian government announced an interest subsidy for public sector banks, RRBs and Co-operative banks. During 2011 and 2012, it was decided to provide a new line of short-term refinance facilities for public sector banks and RRBs from NABARD to strengthen finance position of primary agricultural credit societies. In association with the Indian government, a scheme for promotion and financing of Women SHGs in 150 districts in India was implemented (RBI, 2012b).

Sa-Dhan and the Microfinance Institutions Network work together in discussions with the government and RBI about the issues affecting the microfinance sector. Highmark Credit Information Services Limited, which is a credit information bureau that focuses on MFIs, initiated its operations during 2011 and provided credit information services to a large number of for-profit and not-for-profit forms of MFIs in India. Further, in 2010, Microfinance Transparency implemented its operations in India and in February 2011 published data for around 80 MFIs. The Ministry of Rural Development, launched the National Rural Livelihoods Mission as a plan to invest significantly in intermediate-level institutions that are providing financial services to poor people (Srinivasan, 2011).

2.6.2.4 Growth and challenges for prevailing MFIs

The overall coverage of the sector (outstanding accounts of members of SHGs and clients of MFIs) reached 76.6 million by March 2009. After adjusting for overlaps, the net client base of the microfinance sector is estimated at 70 million with an

outstanding microcredit portfolio of about USD 4.4 billion (Srinivasan, 2009). In 2010, this sector added 10 million new clients and USD 1.56 billion increment in outstanding loans (Srinivasan, 2010). Customer growth between 2008 and 2010 totalled 140.52% and the outstanding portfolio rose by 201.34% (RBI, 2011). The number of MFI loan borrowers in 2011 was approximately 26 million, one of the highest in Asian region (Zhang & Wong, 2014). MIX stated that India was the world leader in the microfinance industry as 20 MFIs in India were ranked in the world top 100 MFIs in 2009.

One of the major challenges ahead for India is to ensure broader access to financial services (Basu & Srivastava, 2005). In India, up to 87% of the poorest households do not have access to credit while approximately 90 million low income households remain under served. The World Bank and the National Council of Applied Economic Research pointed out that more than 70% of rural people in India do not have a bank account, although recent government initiatives announced in 2014 are making inroads into the numbers. As a whole in India, less than 5% of rural poor households have access to microfinance, whereas borrowers only account for 2.2% of the total population (Zhang & Wong, 2014). A significant variation exists across the states in India where 75% of the microfinance funds flow to southern states which have the highest GDP and number of bank branches (Basu & Srivastava, 2005).

Transformation of MFIs still continues among NGO-MFIs as they seek to become for-profit companies in the NBFC model. But then again these institutions have ignored the issues related to the post transformation as how they balance and fulfil the needs of customers and investors (Srinivasan, 2010). Furthermore, the amount of grants and savings has declined over the years. Therefore, another enormous challenge that MFIs in India face is their financial returns. In 2011, return on assets (ROA) is recorded as negative 10.1% which is a significant decrease from 2.67% in 2005-2010. The main reason for this drop is the Andhra Pradesh crisis¹⁸ in 2010

¹⁸ There was a microfinance crisis in Andhra Pradesh which is the capital of microfinance in the country (as rumour has it about 30% of MFI loans), with increasing numbers of suicides among over-indebted clients in some of India's biggest MFIs: SKS Microfinance, Spandana, Share, and others. In order to meet MFIs' growth targets, credit officers often sell loans to clients who are already indebted to other organisations and increase their indebtedness. This resulted in a number of suicides among MFI clients as they were unable to settle their loans. Further, the default rates of

and the enactment of Andhra Pradesh Act by the state government of Andhra Pradesh soon after the crisis which meant MFIs were prevented from collecting unpaid loans and accessing bank funding to protect borrowers (Zhang & Wong, 2014). The crisis brought government attention to the matter and highlighted the need to regulate and monitor MFI activities in India. The minister of finance in India indicated in his budget speech that “the Government is considering putting in place appropriate framework to protect the interests of small borrowers” (Srinivasan, 2011).

2.6.2.5 The financial sector of India

The financial sector of India consists of a variety of financial institutions such as 189 commercial banks, 96 RRBs, 1,854 urban co-operative banks, 31 state-level co-operative banks, seven development finance institutions, 13,020 NBFCs, around 100,000 village-level co-operative societies and other financial institutions, including 155,000 post office network (Basu & Srivastava, 2005; Frankfurt School of Finance & Management, 2009; Sinha, 2009). RBI controls all the banking operations in India, which is the national central bank of India established in 1935. RBI is the regulator of the financial and banking system in India as the authorisation was given by the Banking Regulation Act, 1949 and the RBI Act, 1934 in India (RBI, 2012b).

NBFCs in India are an important part of the microfinance sector. These institutions engage in various financial activities by providing different kinds of financial services to Indian communities, such as loans, investments, and asset financing (leasing and hire purchases). NBFCs are incorporated under the Companies Act of 1956 and categorised into two broad areas based on the liability structure; they are NBFCs accepting public deposits and NBFCs not accepting/holding public deposits (NBFCs-ND). During 2011 and 2012, three new categories of NBFCs were created: the Infrastructure Debt Funds NBFC (NBFC-IDF), Micro Finance Institution NBFC (NBFC-MFI) and NBFC-Factors (RBI, 2012b). Accordingly, NBFCs are

microfinance loans tended to increase. The reported unpaid loan balance of 10 large MFIs in the state of Andhra Pradesh was around USD 550 million by the end of March 2011. This increases the portfolio at risk in the sector (Srinivasan, 2011).

also classified into Asset Finance Companies, Investment Companies, Loan Companies, Infrastructure Finance Companies, Core Investment Companies, NBFC-IDF, NBFC-MFI and NBFC-Factors, based on the activities they conduct.

As per the RBI (2012a), an NBFC-MFI needs to be an NBFC-ND organisation with minimum net-owned funds of Indian Rupees (INR) 50 million (INR 20 million for the North-Eastern Region), not less than 85% of its assets in the nature of 'qualifying assets' and the income derived from the remaining 15% assets must comply with the specified regulations. Further, NBFC-MFI must satisfy the following criteria:

- loan disbursed by an NBFC-MFI to a borrower with a rural household annual income not exceeding INR 60,000 or urban and semi-urban household income not exceeding INR 120,000;
- loan amount does not exceed INR 35,000 in the first cycle and INR 50,000 in subsequent cycles;
- total indebtedness of the borrower does not exceed INR 50,000;
- tenure of the loan not to be less than 24 months for loan amount in excess of INR 15,000 with prepayment without penalty;
- loan to be extended without collateral;
- aggregate amount of loans, given for income generation, is not less than 75% of the total loans given by the MFIs;
- loan is repayable on weekly, fortnightly or monthly instalments at the choice of the borrower.

2.6.2.6 Types of MFIs in India

The microfinance sector in India comprises the SHG-BLP, NBFC-MFIs that are registered with the RBI and all the other small not-for-profit MFIs that are registered as charitable trusts or societies (RBI, 2012b). However, according to SAMN (2010) and Sinha (2009) there are only two major microfinance delivery models in India - the SHG-BLP and MFI model. Agreeing to the RBI (2011), these MFIs can be categorised broadly in four ways as follows;

1. SHG-BLP – This model¹⁹ was started in 1980s by social-development NGOs (Basu & Srivastava, 2005). At present 50% of the SHC-BLPs are promoted by the government (the rural branches of state-owned commercial banks, RRBs and co-operative banks) and the rest of them are promoted by the NGOs and other banks. These programmes are pursued to be strengthened through the grants, training and capacity building assistance provided by the NABARD. This model was pioneered by the NABARD in 1992 with the guidelines issued by the RBI. SHG-BPLs account for around 58% of the outstanding loan portfolio and more than 75% of disbursements are in the Southern region.

2. MFIs – Under the two principal lending models, most top MFIs apply the Grameen group lending methodology to deliver their loans to poor as it allows them to expand their activities quicker than those using the SHG-BLP model. According to the Frankfurt School of Finance & Management (2009) there are around 800 MFIs in India. However, it is difficult to estimate the exact number of Indian MFIs due to the diversity of registration authorities in the country. A survey conducted by MIX market in 2006 found that the seven largest MFIs served around 67% of the borrowers and the three largest institutions served around 54% of borrowers, based in south India²⁰.

3. NBFCs registered with the RBI - Most of the top MFIs are dominated by NBFCs as their aggregate outstanding loan portfolio is 60% of the total loans in the MFI sector. NBFCs are recognised as an important service provider to the small clients because of their localised presence, a higher level of customer orientation and lower documentation requirements. In order to improve such services, the RBI started to regulate NBFCs from 1996. Malegam Committee prepared a report to study the issues and concerns in the MFI sector in India. This committee reviewed definitions of microfinance and MFIs for the purpose of regulating the NBFCs undertaking microfinance activities and studied the issues and concerns relating to interest rates and lending and recovery practices of the microfinance sector. Also

¹⁹ In this model, women are encouraged to form a SHG group and required to contribute small savings to the group. Individual savings in the group can be used to lend by the members in the group for income-generating activities and other livelihood promotions.

²⁰ MIX Market, 2006, Performance and Transparency: A Survey of Micro Finance in South Asia, MIX Market, Washington, DC.

they scrutinised the role of MFI bodies to enhance the best practice and transparency of the sector (RBI, 2011). For-profit MFIs are most widely recognised under this category due to the nature of their operations. Under this model, people in villages are encouraged to form Joint Liability Groups (JLGs) and provide loans to the members of the JLG. These individual loans are guaranteed by the other members of the group. The Microfinance India State of the Sector Report 2010 highlighted an increasing trend for JLGs to get the advantage of loans from MFIs (Srinivasan, 2010).

4. Other small not-for-profit MFIs – These types of MFIs such as trusts, societies, section 25 companies are account for about 8% of the total outstanding loan portfolio. Further, they represent a large number of entities. These categories also have a long history and are governed by different regulatory authorities. The governance structure of these institutions is mostly informal except for section 25 companies as they have relatively better and more formal governance. These institutions are not allowed to mobilise deposits as per the RBI guidelines (Sa-Dhan, 2006).

In addition to the above categories, there are co-operative societies in between for-profit and not-for-profit entities (Sinha, 2009). They were introduced in India in the early 19th century as a defensive organisation to deal with problems of rural indebtedness of famers to moneylenders. Co-operative credits on easy terms freed the famers from borrowing money at usurious rates of interest through moneylenders and became the dynamic economic tool to achieve the social objectives in India.

2.6.2.7 Regulatory framework of MFIs

The coverage and scope of regulations related to MFIs in India are particularly different from other countries due to not only the industry size but also the strong formal public sector (Sinha, 2009). When compared to other South Asian countries, India has a comprehensive regulatory framework to govern its financial intuitions, but there is no sector-specific regulatory or supervisory framework to monitor microfinance activities (Kaladhar, 1997; Sa-Dhan, 2006) except for NBFC-MFIs. Advocates of Indian MFIs argue that the immediate action needs to be taken to

develop a set of prudential norms and set up a supervision mechanism to monitor those norms, enabling MFIs to better serve their clients (Basu & Srivastava, 2005). The different types of MFIs, according to their institutional status, are regulated under their respective Apex body. The scope of the different regulations is presented in Appendix 02.

2.7 Conclusion

This chapter explains how microfinance activities evolved around the world. With the widespread enthusiasm for microfinance activities, many people and organisations have contributed to the growth of this sector. This chapter discusses the different definitions related to microfinance activities and institutions as there is no universally accepted definition for microfinance. An overview of the development of microfinance activities around the world is provided followed by a discussion on the market size of MFIs. While the concept of microfinance is not entirely new, as similar forms have been operating for many centuries across the world, the rapid expansion does present challenges for its development and this study can contribute to the development of the sector. The role of MFIs in both Sri Lanka and India is surveyed in depth whilst identifying the contribution to be made through this research. Further, this chapter presents the evolution of the sector, the role of formal financial institutions in the sector, government involvement in the sector, growth and challenges prevailing in the sector and finally, different types of organisations in the microfinance sector with regard to Sri Lanka and India. This chapter has reviewed the microfinance industry around the world with special reference to Sri Lanka and India.

CHAPTER THREE

LITERATURE REVIEW ON CORPORATE GOVERNANCE

3.1 Introduction

Prior studies find that good corporate governance practices affect the performance of a firm. It is suggested that “Good corporate governance is essential to the effective operation of a free market, which enables wealth creation and freedom from poverty” (Financial Reporting Council, 2010, p. 1). MFIs play an important role in development and it is germane to examine how the evolution of corporate governance systems impacts the performance of MFIs. In order to have a better understanding of the relationship between corporate governance and MFI performance, a starting point is to review prior research on corporate governance and organisational performance.

This chapter first describes the evolution of corporate governance systems around the world, different definitions given by various authorities and the importance of corporate governance for entity performance. There are several major theories relating to corporate governance and consideration of these sheds light on key corporate governance characteristics that impact firm performance. The potential for scrutinising the implications of corporate governance practices in terms of Sri Lanka and India is reported in this chapter. The discussion can then link the nature of corporate governance as it exists in the microfinance sector and its impact on MFI performance, both financial and outreach. Finally, the corporate governance characteristics are discussed as an initiation for the model specification of the next chapter.

3.2 Evolution of Corporate Governance

In 1776, Adam Smith, in his well-known book ‘The Wealth of Nations’, expresses a concern about separating ownership from management, noting that shareholders need to develop a mechanism to control managers (Jensen & Meckling, 1976). In

the early seventeenth century, meetings were conducted by men sitting on stools around a long board laid across two sawhorses. The group of men became, known as the “board”. The board’s leader was given a chair instead of a stool and became known as the “chair-man” (Monks & Minow, 2004, p. 180). Tricker (2000, p. 289) states that “although the theoretical exploration of the subject is relatively new, the practice of corporate governance is ancient” as it has been practised for more than a thousand years.

In academic studies, corporate governance has been a more recent field of study. According to Pye (2000) and Tricker (2000), phrases like ‘corporate governance’ and ‘shareholder value’ were almost absent in the literature in the early 1980s as people ran their organisations smoothly without any tactical, ethical and profitable difficulties. In the late 1980s curiosity in corporate governance grew rapidly among academics and other stakeholders such as practitioners, legislators, policymakers, creditors and shareholders, as their organisations experienced difficulties in raising money and more difficult economic times beset them (Pye, 2000; Vinten, 1998).

Stakeholder concerns for corporate governance are more noteworthy with stock market crashes in 1987 and 1992²¹, the Lloyds Underwriters²² disaster and Long Term Capital Management collapses²³. In response to such matters numerous reports were written by, for example, the Cadbury Committee, the Greenbury Committee, ISO 9000, the Hampel Committee and Turnbull in UK (Pye, 2000; Vinten, 1998). Comparable reports were written in the USA and were followed by Canada, South Africa, Australia and Japan, including collaborative partnerships with the management accountants and internal auditors (Vinten, 2001a).

Stakeholders still find the behaviour and quality of corporate governance unacceptable due to the world famous corporate scandals which were associated with the failure of corporate governance systems. As a result of the scandals, new

²¹ 1992 stock market crash occurred on 16 September 1992 (Black Wednesday), when the British government was forced to withdraw the pound sterling from the European Exchange Rate Mechanism (ERM) due to the fluctuating pound sterling from other member currencies by more than 6%. In UK, many people recall Black Wednesday as a “National Disaster” while others says that forced ejection is a “Golden Wednesday” or White Wednesday”.

²² Lloyd’s underwriters is one of the top underwriters in the world, registered in UK.

²³ Long Term Capital Management was a hedge fund management firm in USA.

governance rules have been introduced by legislators around the world, such as CLERP 9 in Australia, Combined Code in the UK, and the Organisation for Economic Co-operation and Development (OECD) Code. The East Asian financial crisis and the global financial crisis brought another wave of introspection to corporate governance and highlighted the importance of having a broader understanding of corporate governance and its impact on firm performance. Company annual reports now contain more information concerning governance practice of company boards.

3.3 Definitions of Corporate Governance

While there are many definitions of corporate governance in the literature, no single definition has gained overwhelming acceptance. The definitions may vary depending on the author and the dominant theory upon which the author draws. When ownership of a company is separated from the management, then issues relating to governance arise. Tricker (2000, p. 289) suggests the following questions are important when ownership is not applied directly to control the investment:

“How is oversight to be exercised over those delegated to the task of running the venture; how are the owners’ interests to be protected; who sets the direction of the enterprise and ensures its accountability; how is power over the enterprise legitimised; to whom is a company accountable and, ultimately responsible? [...] Corporate governance is about the exercise of such power”.

The Cadbury Committee Report (1992) suggests: "Corporate governance is the system by which companies are directed and controlled" (para 2.5). Those control mechanisms are necessary for organisations to achieve their corporate missions (Bassem, 2009). Sir Adrian Cadbury, in his speech to the Global Corporate Governance Forum, stated that “the corporate governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources. The aim is to align as nearly as possible the interests of individuals, corporations and society” (Cadbury, 2000, p. 1). Shleifer and Vishny (1997, p. 737) explain that “Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return

on their investment”. This is a narrow but precise definition for corporate governance capturing the core concern in the finance literature with agency costs and their resolution.

According to Mathiesen (2002), corporate governance is a field of economics that investigates how to secure/motivate efficient management of corporations by the use of incentive mechanisms such as contracts, organisational design and legislation. This is often limited to the question of improving financial performance, for an example, how corporate owners can secure/motivate the managers, which leads to delivery of a competitive rate of return. Solomon (2007) states that most institutional investors’ views on corporate governance are strongly aligned with Parkinson’s (1994 cited in Solomon, 2007, p. 13) definition where “corporate governance is the process of supervision and control intended to ensure that the company’s management acts in accordance with the interests of shareholders”. Blair (1995, p. 3) points that corporate governance refers “to the whole set of legal, cultural and institutional arrangements that determine what publicly traded corporations can do, who controls them, how that control is exercised and how the risks and returns from the activities they undertake are allocated”.

In a recent view, Brown, Beekes, and Verhoeven (2011) state that corporate governance is the process, customs, laws and policies that the board of directors use to direct, monitor and control firms and ensure the accountability and transparency in relationships of firms with its financiers, customers, managements, employees, creditors and government. They highlight the importance of external parties in an organisation and distinguish between internal and external corporate governance characteristics. Structures and processes that are within the control of the firm’s shareholders and the board of directors are considered to be internal governance characteristics. The external governance characteristics are based on the results of decisions by external parties, such as the decisions of financial institutions, auditors, financial advisors, and corporate and government regulations.

3.4 Importance of Corporate Governance for Entity Performance

The East Asian financial crisis in 1997 and the global financial crisis in 2007 are, in part, indicators of non-compliance of corporate governance practices and failures

in investor protection (Brunnermeier, 2009; Erkens et al., 2012; Radelet et al., 1998). Many famous corporate scandals and failures have occurred, for example Enron, Tyco International and Qwest Communications in United States of America, HIH Insurance, One.Tel, Harris Scarfe in Australia and Air New Zealand²⁴. These led to a call for backing investor protection and good corporate governance practices (France et al., 2002 ; Lockhart, 2004; Radelet et al., 1998). Similarly, evidence relating to the microfinance sector also suggests that a lack of corporate governance practices can cause problems relating to firm sustainability and loss of clients. The malpractices of some MFIs in Andhra Pradesh and Karnataka in India are said to have ultimately increased the debt liability of low income borrowers and forced them to commit suicide (Galema, Lensink, & Mersland, 2012).

It has been thoroughly argued by many scholars, why and how boards and shareholders could let these scandals happen and more specifically, why the corporate governance systems failed so massively. Varma (2005, p. 200) emphasises that “the performance penalty that comes from governance failures in companies is too serious for the institutions to ignore”. Deficient risk management practices, weaknesses in board composition and the failure of non-executive directors and shareholders to effectively monitor and scrutinise the decisions of the boards are highlighted as key areas, requiring reforms to avoid future failures (Brown & Gladwell, 2009).

The debate that follows each “crisis” focuses on ways to improve corporate governance practices across industries and sectors. Evidence shows that improved corporate governance practices lead to an improvement in firm performance (Chung, Wright, & Kedia, 2003; Dalton, Daily, Ellstrand, & Johnson, 1998; Hossain, Cahan, & Adams, 2000). It is asserted that organisations need good corporate governance practices to achieve better performance and to build their reputation. It helps decision makers, such as investors, donors, managers and government authorities, to reach their decisions efficiently and effectively. These ideas have support in various reforms and standards, established at individual

²⁴ Air New Zealand has agreed to pay a penalty of \$7.5 million to settle the long-running, multi-airline cargo price-fixing scandal. Air New Zealand colluded on fixing the prices of fuel and security surcharges for air cargo (Georgina Bond, 2013).

country level and also at an international level (e.g., the Sarbanes-Oxley [SOX] Act 2002 in the US, CLERP 9 in Australia, Combined Code in the UK, and the OECD Code).

3.5 Theories in Corporate Governance

There are two main parties in an organisation; principals (owners/shareholders) and agents (management/employees) and the separation of owners from company control gives rise to potential conflicts of interest between the principal and the agent appointed by the owners to manage the company operations (Cadbury, 2003; Jensen & Meckling, 1976; Solomon, 2007; Tricker, 2000). It is necessary to have a comprehensive structure of controls that encourages efficient performance and responsible behaviour to operate within the organisation in order to limit any discrepancy in interests and ensure appropriate accountability of resources. Corporate governance is therefore used to prevent any conflicts of interest between principal and agent that may result in fraudulent behaviour or cause a decrease in shareholder wealth.

There are ongoing debates regarding mechanisms that allow shareholders to control their managers and encourage goal congruence between shareholders and managers. Based on the arguments of separation of ownership, several theories have been developed for corporate governance. There is no unified corporate governance theory (Carver, 2007; Kiel & Nicholson, 2003; Letza, Sun, & Kirkbride, 2004; Pettigrew & McNulty, 1995) as many theories are used in this field, such as agency theory, stewardship theory, stakeholder theory and resource dependence theory. Although most corporate governance literature is written from an agency theory viewpoint, an increasing portion of the literature is looking at corporate governance through different theoretical lenses (Daily, Dalton, & Cannella, 2003).

3.5.1 Agency theory

The problem of principal and agent has been debated since Berle and Means (1932) gave their focus to the separation of modern corporate management from its owner. Agency theory is considered to be the 'Bible' of corporate governance (Huse, 2007)

and dominates the academic literature (Gabrielsson & Huse, 2004). Its theoretical arguments are in economics, finance and organisational theory, and it has influenced regulators in several countries when looking to reform corporate governance activities (Cornforth & Edwards, 1999). Many studies of corporate governance emphasise the impact of agency theory on company value in maximising the wealth of shareholders, as this theory is highly concerned with the owners' perspective (Fama & Jensen, 1983; Jensen & Meckling, 1976; Mitchell, Agle, & Wood, 1997).

An agency relationship is defined as “a contract under which one or more persons (the principal/s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent” (Jensen & Meckling, 1976, p. 308). There is a likely conflict of interest between the owner and the agent, arising from separating the ownership from control, as both parties wish to obtain maximum benefit for themselves from minimum possible expenditure (Jensen & Meckling, 1976; Mosen & Downs, 1965). According to John and Senbet (1998), agency issues arise due to the excessive perquisites, underinvestment, overinvestment, risk shifting, asymmetric information, bankruptcy and financial distress.

Both parties have different interests and the principal cannot ensure the agent is always taking decisions that best meet the principal's interests. For example, when a firm makes a considerable amount of money, agents might spend the money on wasteful projects or use the money to buy other companies which may not be able to maximise the value of the firm. Agency theory highlights that when the interests of the principal and the agent vary, the principal incurs agency costs to implement several internal and external mechanisms to control their agents (Davis, Schoorman, & Donaldson, 1997; Eisenhardt, 1989; Fama & Jensen, 1983; Hill & Jones, 1992; Jensen & Meckling, 1976; Ross, 1973; Short, Keasey, Wright, & Hull, 1999).

Hansmann (2000, p. 38) defines agency costs as “the sum of the costs incurred in monitoring and the costs of managerial opportunism that result from the failure or inability to monitor with complete effectiveness”. Principals need to bear a number of agency costs, such as monitoring expenditure, bonding expenditure and residual losses (Jensen & Meckling, 1976) and the costs of structuring, monitoring and

enforcing contracts (Fama & Jensen, 1983). However, to reduce the effects of agency cost, principals need to implement effective and efficient corporate governance practices in their organisations (Eisenhardt, 1989; Hill & Jones, 1992; Ross, 1973).

Agency theory has been used by many disciplines as an important theory as well as a controversial theory when studying corporate governance (Eisenhardt, 1989; Mitchell et al., 1997). It provides a suitable way of explaining relationships when both interests are at odds and better agreements can be implemented through appropriate monitoring and a well-organised compensation system. According to agency theory, director boards are appointed by the shareholders to monitor the activities of management, and this monitoring process can be performed through independent non-executive directors and CEO/chairman duality.

Researchers have argued that this theory is simple and human beings are more complex than described in this model which doesn't capture the fruitfulness of human relations (Doucouliagos, 1994). Therefore, additional theory is needed to clarify other types of human behaviours and this is found in literature outside the economic perspective.

3.5.2 Stewardship theory

Agency theory has its roots in economics and finance and other disciplines have brought forward theories. Stewardship theory emerges from the disciplines of psychology and sociology (Muth & Donaldson, 1998). As a result of the arguments in agency theory, Donaldson and Davis (1991) developed a new theory, known as 'stewardship theory' as a counter strategy to agency theory. They argued that agency theory was simplistic and ambiguous and suggested that the usual conflicts of interest between the principal and agent could be prevented by having senior executives act as stewards for the betterment of shareholders' interest. This theory assumes that the manager makes decisions in the best interest of the organisation, even when their interests are not aligned with the principals' interests, because they think the ultimate benefit comes when the organisation thrives.

Stewardship theory pinpoints that managers work not only for financial reasons but for non-financial motives such as recognition, intrinsic satisfaction of successful

performance, respect for authority and a work ethic (Muth & Donaldson, 1998). Further, concepts like these are well supported in the organisational literature (Herzberg, 1966; McClelland, 1961). According to stewardship theory, stewards are working to maximise the organisational performance with the objective of getting benefit from a strong organisation. They perceive better value in co-operative behaviour and therefore behave accordingly; their behaviour can be considered rational. The stewards attempt to achieve organisational objectives such as profitability and this behaviour benefits the principals through better profits. They maximise shareholder wealth by achieving good performance so that stewards are able to maximise their utility functions.

Arthur, Garvey, Swan, and Taylor (1993) claimed that Donaldson and Davis (1991) misunderstood agency theory because they analysed shareholders' interest incorrectly. This view revitalised agency theory to a modern perspective. Further, Arthur et al. (1993) argue that the Donaldson and Davis (1991) theory is on the grounds that managers are motivated by the debt and capital structure of the firm so that the firm creates long-term wealth for their owners.

Agency and stewardship theories of management explore the extent to which authority should be given to managers and examine the set of assumptions that the owner has regarding the manager, as well as the effect those assumptions have on management decision making. In agency theory, the owner begins with the assumption that the manager seeks to maximise his or her individual utility whereas stewardship theory begins with the assumption that there is a strong relationship between the success of the organisation and the principals' satisfaction. However, both theories focus on the leadership philosophies adopted by the owners of an organisation.

3.5.3 Stakeholder theory

Stakeholder theory is an extension of agency theory and was developed by R. E. Freeman from the 1984 publication of *Strategic Management - A Stakeholder Approach*. In response to the changes that occurred in the business environment in the 1980s, scholars developed a new conceptual framework and broadened the word 'stockholder' by defining stakeholders as "any group or individual who can effect

or is affected by the achievement of the organisation's objectives" (Freeman, 2010, p. 25) such as owners, employees, customers, competitors, suppliers, environmentalists, governments, local community organisations and all the other groups who play a vital role in the success of a business in today's environment.

The origins of stakeholder theory are in politics, law and management theory. But in recent years this theory has been dominant in corporate governance studies (MacMillan & Downing, 1999). In stakeholder theory, the board role is to perform as the representatives of stakeholders in the corporation (Freeman & Reed, 1983). When boards are making their corporate decisions, they need to consider the interests of other stakeholders, not only the interests of shareholders. Based on the various assumptions about the stakeholder theory, Huse and Rindova (2001, p. 157) outline different board functions, such as advice, influence, information, initiation, legitimation, lobbying, monitoring, ratifying and supporting.

Donaldson and Preston (1995) state that stakeholder theory rejects shareholder wealth maximisation as morally untenable. Jones and Wicks (1999) suggest that this theory understands that human behaviour is more complex than self-serving. If a company looks after its stakeholders, acts morally and attends to social purposes then the company will be more successful (Letza et al., 2004). Boards have to explore the expectations of various stakeholder groups by explicating and comparing, and they also need to assess the importance and power of stakeholders as they diverge (Freeman & Reed, 1983; Huse & Rindova, 2001). They have to maintain an appropriate balance between the various demands and make trade-offs between stakeholders (Vinten, 2001b). However, boards need different types of measures to recognise aspects of firm performance, such as generation of goodwill (MacMillan & Downing, 1999, p. 19) and CSR (Jones & Wicks, 1999, p. 209).

According to Donaldson and Preston (1995), stakeholder theory does not provide any guidance for the board about the legitimate stakeholders. Even though stakeholder theory has become a staple in management theory, Sternberg (1998, p. 127) states that it is "fundamentally misguided, incapable of providing better corporate governance, corporate performance or corporate conduct. The stakeholder doctrine [theory] is indeed intrinsically incompatible with all

substantive corporate objectives, and undermines both private property and accountability”.

3.5.4 Institutional theory

Institutional theory provides a rich and complex view of an organisation and has spread rapidly due to the influences of institutional forces on organisational and decision making processes (Hoskisson, Eden, Lau, & Wright, 2000; Zucker, 1987). This theory emphasises that an organisation’s activities and behaviour are affecting and encircled by the political, social and economic systems surrounding the organisation (Scott, 2001). In recent years, institutional theory has evolved as a major theory for explaining an organisation’s structure and its actions, as it “emphasises that organisations, organisational fields, and nations are more than a means to produce goods and services – they are also social and cultural systems” (Judge, Douglas, & Kutan, 2008, p. 766). The fundamental rationale behind institutional theory is that people can increase their understanding of an organisation by examining the normative environment in which an organisation exists (Martinez & Dacin, 1999) and it suggests that the actions of organisations occur as a response to conditional and pressures inherent in the environment (Badry, 2009, p. 18).

Scott (2001) pinpoints that institutional theory has three levels of analysis. The highest level consists of the societal and global institutions which smooth and shape the structures and actions in lower levels. The second level has governance structures that consist of organisational fields and organisations themselves. These governance structures are based on the rules, norms, understandings and routings (March & Olsen, 1989). At the final level, there are the actors who may be the individual or groups. Each level is highly important as it influences “the forces of diffusion and imposition of institutional norms while inventing new ways of operating and negotiating the establishment of institutional norms” (Judge et al., 2008, p. 768). These influences lead organisations to be guided by legitimated elements, from standard operating procedures to operational certificate and state requirements (Zucker, 1987). This highlights that institutional theory is heterogeneous and its adoption depends on the individual organisation and the

institutional environment (Scott, 2001). Further, this theory is highly important for developing countries, because the development of formal and informal institutional systems is a main characteristic of these countries.

Organisational theorists continue to devote their attention to finding increased convergence and integrative efforts among the organisational theories as they strive to provide a better understanding of organisational activities. As such, Martinez and Dacin (1999) integrate the relevant aspects of transaction cost theory and institutional theory in order to strengthen the explanatory power of both theories. However, in contrast to the traditional agency theory or transaction cost theory, Davis (2005) highlighted that the most promising and significant corporate governance studies try to recognise the institutional environment which occurs from a sociological perspective. Also, new institutional economics are now moving their focus from firm-level individuals to institutional environments as a strategy to explain corporate governance behaviour and its results in a better way (Groenewegen, 2004). An important area of concern is the interaction of firms and institutions, resulting from market imperfection and efforts to obtain legality with the corroboration of social expectation and embeddedness of the organisation (Badry, 2009).

3.5.5 Resource dependency theory

Resource dependency theory has its roots in economics and sociology and, in the opinion of some researchers, has become one of the most influential theories in organisational theory and strategic management (Collins, Withers, & Hillman, 2009). The theory highlights that organisations are interdependent with their environment as they have to survive with other organisations and their resources (Collins et al., 2009; Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978; Provan, 1980). Pfeffer and Salancik (1978) state that “to understand the behaviour of an organisation you must understand the context of that behaviour - that is, the ecology of the organisation” (p.1). The ecology of organisations has three major themes; the importance of the environment or the social context of organisations, the importance of opportunities to do things such as co-opting, and the importance of

the construct of power for understanding both intra-organisational and inter-organisational behaviour (p. xii).

This theory characterises the organisation as an open system and as a result it needs to find ways of managing this system by ensuring that it gets the resources and information it needs. In this theoretical context, the role of the corporate board is boundary-spanning as the board is part of the organisation and its environment. As per the theory, boards decrease ambiguity by creating powerful links between organisations and try to co-opt external influences (Provan, 1980). The main function of the board is to maintain good relationships with key external stakeholders to ensure the resources flow and to assist the organisation to react to external change.

Board members include stakeholders and influential community parties who can provide legitimacy and prestige with their knowledge, skills and important external links (Hillman, 2005; Huse & Rindova, 2001; Provan, 1980) which are aligned to environmental dependencies (Hillman, 2005; Westphal, 1999). Based on this theory, organisations require larger boards with greater external linkages to resources and higher quality advice to improve firm performance (Dalton, Daily, Johnson, & Ellstrand, 1999; Provan, 1980). Therefore, boards are driven by external directors with some executive directors required for firm-specific information (Dalton et al., 1999). Researchers argue that this theory raises firm performance and increases returns to shareholders (Dalton et al., 1998; Hillman & Dalziel, 2003) but does not envisage boards as evaluators of management (Hillman & Dalziel, 2003). Boards can advise management on the external environment where it helps to reduce the uncertainty and aid firm survival by dealing with external threats (Dalton et al., 1998).

3.5.6 Legitimacy theory

Legitimacy is a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman, 1995, p. 574). Legitimacy is socially constructed. It reflects the congruence between the behaviours of the organisations and the shared beliefs of some groups in society. Legitimacy

improves the organisation's stability and compensability of its activities. This theory is based on the idea that in order to continue operating successfully, corporations must act within the bounds of what society identifies as socially acceptable behaviour (O'Donovan, 2002). When an organisation fails to conform with society in an acceptable manner, it can lead to restrictions being imposed on the organisation's operation, resources and demand for its products and ultimately its survival.

Why should organisations be socially responsible or legitimate? In the corporate arena, it appears to be a necessary condition to generate acceptable returns for shareholders. However, there is growing body of research emphasising that organisations should satisfy a broader group of stakeholder expectations reflecting an interest in more than just financial aspects of the organisation (Dowling & Pfeffer, 1975; O'Donovan, 2002). Organisations operate in a social system and society gives them permission to own and utilise natural resources and obtain human resources (Deegan, 2006; Dowling & Pfeffer, 1975). They should fulfil the expectations of society at large, not merely the investors' requirements as mentioned in shareholder theory. Therefore, organisations should be socially responsible in the way they operate and in their use of resources.

Legitimacy theory signifies that organisations in the business environment have a social contract with society and the existence of those organisations depends on society approval (Deegan, 2006). The aim of the social contract between the organisation and individual members of society specifies that an organisation can make a profit but at the same time they have a moral obligation to act in a socially responsible manner (O'Donovan, 2002).

When there is an actual or potential disparity between organisational actions and society values then there will be a threat to the organisational legitimacy which creates a legitimacy gap. This threat may take place in the form of legal, economic or other social sanctions (Dowling & Pfeffer, 1975). Corporate governance plays a vital role in recognising any legitimacy gap between organisation and society and responsible to bring about congruence with the organisation's objective to legitimise its operations within the society in which it operates.

3.6 Empirical Implication of Corporate Governance

In 1992 the Cadbury Committee identified many issues in theories relating to corporate governance in terms of management discipline. It made recommendations for best corporate governance practices, for which standards are determined by the actions that companies are using to direct and control their firm and by the legal, financial, and ethical environment in which they work (Cadbury, 2003). Hart (1995) points out that the Cadbury recommendations on corporate governance are general and help to ensure that companies are managed appropriately. But the Cadbury recommendations are not a substitute for governance mechanisms. As Hart (1995, p. 688) argues:

“corporate governance issues arise wherever contracts are incomplete and agency problems exist [...] a market economy can achieve efficient corporate governance by itself [...] it is important to ensure that existing mechanisms can operate freely to provide appropriate checks and balances on managerial behaviour”.

Traditional firms have faith in corporate governance as a technique to mitigate agency cost by managing and monitoring agents' work in principals' business entity. At present, in a contemporary turbulent business environment, corporate governance is an essential adherence function. Shareholders and boards need to take various corporate governance actions, such as selecting board members, establishing committees and their members, appointing the CEO and appointing company auditors. Then they can delegate powers, duties and responsibilities accordingly to different functionaries against a framework of common practices or the practices recommended in codes of best corporate governance.

Although there are several theories that relate to corporate governance practices, such as, agency theory, stewardship theory and resource dependence theory, there is no unified corporate governance theory (Carver, 2007; Kiel & Nicholson, 2003; Letza et al., 2004; Pettigrew & McNulty, 1995). Furthermore, evidence shows that different countries and industries react differently in terms of corporate governance practices (Bonn, 2004; Craswell, Taylor, & Saywell, 1997; Farrar, 2001; Hanson, Dowling, Hitt, Ireland, & Hoskisson, 2002). For example, SOX Act 2002 in the US, Combined Code in the UK, and the OECD Principles of Corporate Governance in

OECD member countries. Also, corporate governance researchers have tended to focus attention on developed economies whereas studies on corporate governance issues relating to emerging economies (such as India and Sri Lanka) have not been well-developed (Daily et al., 2003).

3.7 Corporate Governance System in Sri Lanka

The Code of Best Practice on matters related to financial aspects of corporate governance was first issued in 1997 as a voluntary best practice code by the Institute of Chartered Accountants of Sri Lanka (ICASL), which was the first appearance of corporate governance in Sri Lanka. To be in line with the Combined Code of UK the existing code was subsequently updated and issued in 2003 as the Code of Best Practice on Corporate Governance. The corporate governance system in Sri Lanka is heavily influenced by the British model and covers not only financial aspects of corporate governance but also directors, shareholders and auditors in the firm.

In 2008, with the collaboration of Securities and Exchange Commission of Sri Lanka, the ICASL revised the Sri Lankan Code of Best Practice on Corporate Governance. The revision in 2013 was also jointly initiated by these two regulatory bodies after reviewing the UK Corporate Governance Code, Code of Corporate Governance in Singapore, Corporate Governance Principles and Recommendations of the Australian Securities Exchange, Report of the New York Stock Exchange (NYSE) Commission on Corporate Governance, the Malaysian Code on Corporate Governance and Corporate Governance Voluntary Guidelines in India.

Corporate governance codes have evolved in Sri Lanka during the past 15 years from a voluntary code of compliance to mandatory rules. Listed companies in Sri Lanka have had to comply with these codes since 2008 after it was incorporated into the Colombo Stock Exchange (CSE)²⁵ listing rules from 2007 (section six of the listing rules deals with the corporate governance rules). These mandatory rules are to help listed companies to enhance their board effectiveness and strengthen their business integrity. In addition, there has been a positive effect on corporate

²⁵ The CSE is the main stock exchange in Sri Lanka and has 243 listed companies which represent 20 different business sectors.

governance practices in Sri Lanka through the economic and financial sector reforms and capital market development in recent years. For example, the CBSL issued Direction on Corporate Governance for LCBs and RFCs in 2008 (CBSL, 2012b, 2013).

In the Code of Best Practice on Corporate Governance, the company boards should have a balance of executive and non-executive directors. Sufficient number of non-executive directors is considered necessary to promote more transparent and unbiased decision making. Accordingly, a company board should consist of at least two non-executive directors or one third of the total number of directors, whichever is higher. Further, these non-executive directors should be independent of management and free of any relationship with the business. The code also highlights that there should be a clear division of responsibilities between chair and CEO of the company, and if both roles are combined then there should be a justification included in the annual report. Where both roles are embraced by one person, then the majority of the board should comprise non-executive directors. In addition, all listed companies should have an independent internal audit function to provide a reasonable assurance regarding the achievement of company objectives. The internal auditor reports to the board subcommittees, such as the audit committee. (Code of Best Practice on Corporate Governance 2013).

3.8 Corporate Governance System in India

The concept of corporate governance was emphasised in India after commercial liberalisation began in 1991 and the establishment of the Securities and Exchange Board of India in 1992 (Afsharipour, 2009). There has been spectacular growth in the size of the Indian stock market since then but also many corporate scams such as the Ketan Parikh scam, the Harshad Mehta Stock Market scam and Vanishing Company scam. Indian companies had poor disclosure practices, boards of directors without adequate fiduciary responsibilities, disagreeable stock market practices and a general lack of transparency in commercial activities. Therefore, it was necessary to establish reforms and global standards for the companies to reformative actions for economic stabilisation.

With the launch of the Cadbury Committee Report, the Confederation of Indian Industry (CII)²⁶, the Ministry of Corporate Affairs (MCA) and the Security and Exchange Board of India (SEBI) initiated development and promotion a code for corporate governance which could be adopted by the corporate entities in India. The first voluntary code of corporate governance in India has launched by the CII and it was in line with the Cadbury Committee Report, which was the primary source for Indian corporate governance rules. This endeavour came in April 1998 under the name of “Desirable Corporate Governance: A Code (CII Code)”. The second major initiative was undertaken by SEBI in 1999 by establishing two committees to improve the standards of good corporate governance. In early 2000, these two committees made key recommendations concerning the existing code of corporate governance in India and changes were incorporated into Clause 49 of the Listing Agreement of the Stock Exchange (Afsharipour, 2009; Som, 2006).

Clause 49 of the Listing Agreement applies to all listed companies in India. Indian listed companies should appoint an optimum combination of executive and non-executive directors to their boards. This leaves company boards to exercise objective judgments on corporate matters which are independent from management whenever there is a conflict of interest (SEBI, 2004). Furthermore, Clause 49 has both mandatory and non-mandatory requirements for listed companies. As an example, the constitution of an audit committee is mandated for the listed companies but the constitution of a remuneration committee is a non-mandatory provision in Clause 49 (Som, 2006).

After the introduction of Clause 49 in the Listing Agreement of the Stock Exchange, the importance of corporate governance reached a dominant phase in India. The MCA established the National Foundation for Corporate Governance in association with CII, the Institute of Company Secretaries of India and Institute of Chartered Accountants of India to enhance the awareness of implementing good corporate governance in corporations. Concurrently with the above initiatives, the MCA and the Ministry of Finance of the Government of India also formed committees to operationalise enhanced corporate governance in India by reforming the Companies

²⁶ CII is the India’s largest industry and business association.

Act of 1956 to Companies Act of 2013, which is the backbone of Indian corporate law. To align with the new company Act of 2013, SEBI made amendments to Clause 49 of the Listing Agreement in 2014.

3.9 Nature of Corporate Governance in MFIs

In the microfinance literature, governance first appeared in 1997 in the CGAP report under the topic of “Effective Governance for Microfinance Institutions”, emphasising the relationship between boards of directors and the management of MFIs (Lapenu & Pierret, 2006). The literature contributes to emphasise the importance of corporate governance for the microfinance sector because it is a significant factor for enhancing the viability of the industry (Hartarska, 2005; Labie, 2001; Mersland, 2011; Mersland & Strøm, 2009; Varottil, 2012). MFI principals hire agents to manage their MFI’s operation and in many instances there is ultimately a negligible return achieved. Principals, it is suggested, expect to gain assurances on the funds/donations made by them for MFI activities (Sinclair, 2012). It is very difficult for principals to monitor the actual flow of money with information independent of the MFIs (Sinclair, 2012). When corporate governance incorporates a high level of continuous disclosure market forces respond to the information and impose pressure on the firm to shape up (Varma, 2005). These pressures tend to be absent from the MFI sector.

In addition to the high growth rate of microfinance around the world and an increasing number of heterogeneous institutions in the microfinance sector, there have been some serious complaints of unfair practices and low transparency in MFI affairs. Potentially, these have arisen due to increasing competition between MFIs and the evidence available suggests that the lack of corporate governance practices contributes to problems relating to firm sustainability and loss of clients. Malpractice by some MFIs in Andhra Pradesh and Karnataka, India, ultimately increased the debt liability of poor borrowers and was even attributed to causing the suicide of some clients (Galema et al., 2012; Rooyen et al., 2012). MFIs need good financial and management practices to operate their micro-financing activities more transparently and sustainably (Barry & Tacneng, 2014; Caudill et al., 2009). Sound corporate governance practices are viewed as a way of helping MFIs to operate

more effectively and efficiently (Hartarska, 2005). It has become a hot issue among policy makers ruminating over which model of corporate governance practices should be recommended for MFIs to enable them to perform well (Milana & Ashta, 2012).

There is a substantial body of consultancy reports and general guidelines on governance. Some reports relate to all industries and some are more focussed, promulgating guidelines for specific industries. However, general guidelines on corporate governance have not been put into practice by MFIs (Arthur et al., 1993; Mersland, 2009). General guidelines for corporate governance are deemed adequate for MFIs as there are cultural and regional differences that require the development of a specific framework for corporate governance (Gant et al., 2002). Varottil (2012) states that MFIs need a specific corporate governance framework even when they are examined from a theoretical perspective. A view of corporate governance, which suggests that the corporate governance is an area where market discipline is more valuable than regulation (Varma, 2005), is important and may be reflected in the pursuit of higher returns by MFIs and by concentrating their work in urban areas.

Similar to the early savings banks, many MFIs struggle to identify board members with an appropriate background who are able and willing to dedicate the time to effective monitoring (Armendariz & Labie, 2011). Mersland (2009) identifies corporate governance factors that affect the performance of MFIs; CEO/chairman duality, international directors, internal board auditor, board size, shareholder ownership, female CEO. Furthermore, Mersland and Strøm (2010) examine the relationship between firm performance and corporate governance in MFIs by using secondary data of third-party rating agencies. They find that the local directors, internal auditors and female CEOs can help to improve the financial performance of MFIs. Also the number of credit clients of the organisation increases if there is CEO/chairman duality. They suggest an industry-specific approach to MFI governance.

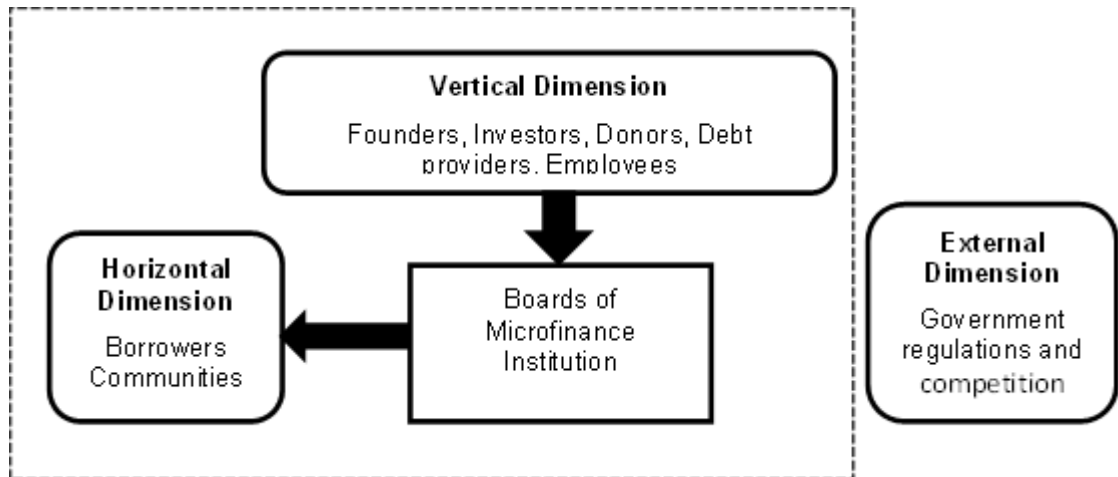
As stated by Labie (2001), an agency cost framework can be applied to the microfinance sector, and emphasising outreach performance rather than financial performance should be a priority for MFIs. This is highly important for MFIs compared with traditional firms in terms of assessing their corporate governance.

However, Mersland and Strøm (2009) state that an agency cost framework cannot be applied to MFIs to deal with the relationship between financial performance and outreach. In the microfinance sector, corporate governance issues are subjected to a different set of factors that successfully target the core of the relationship between financial performance and outreach.

Bassem (2009) uses a self-conducted survey, annual reports and MIX market data for a study on governance and performance of MFIs in Euro-Mediterranean countries. He highlights how governance mechanisms can improve the performance of Euro-Mediterranean MFIs in relation to outreach and sustainability. Lapenu and Pierret (2006, p. 10) state that the “good functioning” of the board of directors is not enough to guarantee the success of MFIs. Other governance mechanisms probably play a more important role. It is necessary to broaden the scope of a study to include all stakeholders involved (employees, managers, elected officials, clients, donors, bank partners, shareholders, the government, etc.) as well as any organisational form with a “governing” role that may have been set up at the inception of the institution. Mersland (2011) recommends in his study that stakeholders such as donors, depositors, local communities and bank associations can provide a monitoring system to boost the existence of MFIs.

Mersland (2009) states that in order to identify the various relationship dimensions within MFIs through a corporate governance viewpoint, it is necessary to develop a three dimensional approach which comprises the relationships between MFIs and their equity investors, debt financiers, employees, borrowers, community, competitors and government regulations. Figure 3.9-1 demonstrates the diagrammatic representation of the three dimensional approach. Further, Mersland emphasises the importance of having more studies in this sector to better understand the governance system for MFIs. He also recommends further research should be conducted to identify how the combination of organisational types enhances competition in the microfinance industry and affects performance of MFIs.

Figure 3.9-1: Relationship-Dimensions of MFIs



However, the increasing popularity of microfinance as a development and anti-poverty tool has pushed the industry towards financial self-sufficiency and created a tension between the MFI’s dual mission of financial self-sufficiency and social orientation (Sinclair, 2012). Furthermore, Varotttil (2012) and Sinclair (2012) point out that the commercialisation of MFIs from non-profit institutions to for-profit institutions has created several issues in the industry. Even if the commercialisation of MFIs has assisted in scalability and outreach by broadening the scope of financial support for poor people, it has caused MFIs to turn back their social goals. According to Arena (2012), microfinance providers are drifting away from their mission and corporate governance is being blamed. This is because the existing corporate governance practices available to MFIs are only influencing their ability to raise capital and that has created a perception that private interests are benefiting from the vulnerability of the poor.

It is important to investigate the extent to which corporate governance pays attention to the interests of the poorer sections of society as stakeholders (Mersland & Strøm, 2010). Through the application of social corporate governance, MFIs can give more attention to the poor stakeholders and mitigate the problem of getting away from the mission. As Arena (2012, p. 269) states:

“Unlike traditional corporate governance mechanisms, the social corporate governance is designed to vindicate the organisation's social and development goals. This note argues that social corporate governance

mechanisms, when properly balanced against traditional corporate governance structures, alleviate the tension between financial and social development goals and provide a solution to mission drift in microfinance”.

Consideration of both financial performance and outreach encompasses a generally overlooked consideration that these concepts are not necessarily compatible (Hermes et al., 2011). While the mission might be outreach to the rural poor, the practice may focus on financial performance which is more readily achieved through consumer loans to clients in urban areas (Hermes et al., 2011; Montgomery & Weiss, 2011; Rooyen et al., 2012). This has been confirmed by the New York Times in a front page article, “Banks making big profits from tiny loans,” which criticised the microfinance sector in general (Sinclair, 2012). By shifting from financial aspects of governance, it is timely and important to focus on social aspects of governance to identify the appropriate corporate governance mechanisms for MFIs. The financial feasibility of MFIs can develop by having a rational approach toward financial objectives (Mersland, 2011). Accordingly, among policy makers there is a hefty debate on the compatibility or trade-off between financial sustainability and outreach of the microfinance sector (Hermes et al., 2011). Lapenu, Foose, Bédécarrats, and Verhagen. (2009) state that the integration of social mission with strategic and operational decisions is therefore essential to mitigate the mission drifting of MFIs.

3.10 Corporate Governance Characteristics

Even though many studies have been conducted to identify the relationship between corporate governance practices and firm performance, there are limited scholarly studies conducted for the microfinance industry in relation to corporate governance. Many prior studies have mainly concentrated on the innovative lending technologies to increase lending to the poor and their impact on borrowers’ welfare. Therefore, the empirical analysis of good corporate governance practices in relation to MFIs is still at an immature stage and it is important to conduct more studies in this field to enhance MFIs’ development (Bassem, 2009; Cull et al., 2007; Hartarska, 2005, 2009; Hartarska & Nadolnyak, 2007; Mersland, 2009; Mersland & Strøm, 2009).

Studies undertaken in the for-profit sector have shown that good corporate governance enhances the financial performance of firms. The same rationale recommends that good governance practices by MFIs would enhance their performance, sustainability and reduce risk. Questions such as who is serving on the board, how they are selected and what motivates them to take a seat on the board are important to examine, as they help to understand the reality of corporate governance (Lorsch & MacIver, 1989). The future of the firm will be decided on the board's effectiveness (Abdullah, 2004; Gabrielson & Huse, 2004). Therefore, it is important to examine the empirical evidence of corporate governance mechanisms that improve firm performance.

However, the debate regarding what constitutes good corporate governance practices is not yet finalised, due in part to the scandals that contributed to the failure of corporate governance systems and subsequent regulations in many jurisdictions. In addition, prior testing of the relationship between corporate governance practices and firm performance in the for-profit companies reported inconclusive evidence (Bathula, 2008; Bhagat & Black, 1999; Weir, Laing, & McKnight, 2002). Some researchers find evidence of a positive relationship between corporate governance and firm performance (Gompers, Ishii, & Metrick, 2003; Kyereboah-Coleman & Biekpe, 2006), while others observe evidence of a negative relationship between governance and performance (Hambrick, Cho, & Chen, 1996; Rose, 2007; Sheridan & Milgate, 2005). In addition, some studies report no evidence to support a link between corporate governance and firm performance (Abdullah, 2004; Baliga, Moyer, & Rao, 1996; Dalton et al., 1998). Dalton et al. (1998) and Weir et al. (2002) suggest there is little evidence to support the view that board characteristics have an impact on firm performance.

In a Sri Lankan context, the study conducted by Heenetigala (2011) using a sample of 37 companies from the top 50 CSE listed companies, shows there is a positive relationship between board composition and return on equity (ROE). Similarly, Hewa-Wellalage (2012) finds a positive relationship between corporate governance and financial performance and a negative relationship between corporate governance and agency costs for multinational company subsidiaries and local public companies in Sri Lanka.

However, governance studies undertaken in India detect both positive and negative relationships (Chugh, Meador, & Kumar, 2011; Dey & Chauhan, 2009; Jackling & Johl, 2009; Kota & Tomar, 2010). Chugh et al. (2011) and Jackling and Johl (2009) find a significant negative relationship between corporate governance and firm performance whereas Kota and Tomar (2010) note a positive relationship between corporate governance and firm performance. Another study conducted for Indian state-owned enterprises exhibited a significant positive relationship between corporate governance reforms and performance (Locke & Duppati, 2014). Furthermore, a study conducted for Indian banks showed that there is no significant relationship between corporate governance structures and financial performance (Pandya, 2011). Evidence suggests that Indian banks have a very weak governance mechanism as their agency costs did not decline during 2005 to 2013 (Acharya, Dupatti, & Locke, 2015).

This conflicting evidence supports the view that corporate governance practices are very much related to the country, its history, industry and the nature of the firms. Therefore, it suggests that further investigation relating to corporate governance practices and performance of MFIs may contribute to a better understanding to promote a country's longer-term economic development.

Within the literature, various corporate governance mechanisms are identified as having the potential to stimulate good corporate governance, such as board size (de Andres, Azofra, & Lopez, 2005), board composition (Kiel & Nicholson, 2003), board diversity (Mersland, 2009), gender diversity (Erhardt, Werbel, & Shrader, 2003), CEO/chairman duality (Dey, Engel, & Liu, 2011) and internal audit function (Bassem, 2009; Sarens, Abdolmohammadi, & Lenz, 2012), which guides to improved financial performance and outreach. These corporate governance mechanisms are compatible with the agency theory perspective as they can possibly mitigate agency problems in a firm. Agency theoretical literature suggests that reduction in agency costs leads to improved financial performance. Therefore, the following section provides a brief review of the literature relating to good corporate governance mechanisms that are utilised in this study.

3.10.1 Board diversity

The phrase “board diversity” has become entrenched in corporate governance vocabulary in recent years. According to van der Walt and Ingley (2003), board diversity is a mixture of attributes, characteristics and expertise that supports board processes and decision making. Diversified boards have moral obligations to their stakeholders and are interested in obtaining consensus relating to broad decisions. Arguably, diversified boards understand the market place better and have creativity and leadership that may promote valuable global relationships (Robinson & Dechant, 1997).

Boards of directors in a company need to have the right composition to provide diverse viewpoints (Milliken & Martins, 1996). The Alliance for Board Diversity in 2010 found that 72.9% of directorships in Fortune 100 companies were held by white men and the rest were held by minorities and women. The situation has existed since 2004 (Krus, Morgan, & Ginsberg, 2012, p. 1). However, recent studies on corporate governance have focused on increasing the diverse representation on corporate boards because greater diversity means a more independent board (Jensen & Meckling, 1976) which monitors managers’ behaviour better.

Researchers using agency theory and resource dependency theory argue that the relationship between board diversity and firm performance should be positive. According to agency theory proponents, companies that have the right composition of board directors provide diverse viewpoints which lead to improved firm performance. Supporters of resource dependency theory emphasise that an increase in board diversity leads to an increase in linkages to additional resources (Keasey, Thompson, & Wright, 1997), connections to the firm’s external environment (Pfeffer, 1973) and improvement in organisational value and performance (Huse & Solberg, 2006).

Exponents of legitimacy theory and stakeholder theory argue that maximising shareholder interest is not the sole objective of a firm because the rights of different stakeholder groups should also be considered. Proponents of legitimacy theory argue that organisations are bound by the social contracts that they have with the societies in which they operate their business. Therefore, the continued existence of a business depends on society’s approval of its existence (Deegan, 2006).

Compared to agency theory, supporters of legitimacy theory and stakeholder theory argue that organisations cannot only maximise owners' or investors' expectations. They also need to consider the expectations of society, otherwise business continuation becomes an issue (Gray, Owen, & Adams, 2010).

On the other hand, stakeholder theory tends to be concerned with the relationship between an organisation and its stakeholders. According to Freeman (2010), stakeholders tend to include employees, customers, competitors, suppliers, environmentalists, governments, local community organisations and all other groups that play a vital role in the success of a business in today's environment. As claimed by stakeholder theory, the role of the board is to represent the stakeholders in the corporation (Freeman & Reed, 1983). The proponents of stakeholder theory believe that by looking after the stakeholders, acting morally and attending to stakeholders' social purposes, the company can become more successful (Letza et al., 2004).

Heenetigala (2011) states that listed companies in Sri Lanka show there is a positive relationship between board composition and ROE. In the MFI context, many firms struggle to determine the right composition of board members who are dedicated to improving, monitoring and supervising the MFI (Armendariz & Labie, 2011). Most of the board members of not-for-profit MFIs are generally upper or middle class professionals. Furthermore, Mersland and Strøm (2009) state that stakeholders such as donors, customers, employees and debt holders are generally absent from MFI boards. They require corporate boards to consist with different stakeholders in the organisation as the directors are safeguarding their values and need to know their stakeholder expectations.

3.10.2 Gender diversity

The board diversity concept suggests that boards should reflect the structure of society and properly represent the gender, ethnicity and professional backgrounds of those within it. Gender diversity is considered part of the broader conception of board diversity (Milliken & Martins, 1996) and several empirical studies have investigated elements of gender diversity as a corporate governance factor (Adams & Ferreira, 2009; Ahern & Dittmar, 2012; Farrell & Hersch, 2005; García-Meca,

García-Sánchez, & Martínez-Ferrero, 2015; Goergen & Renneboog, 2014; Matsa & Miller, 2013; Milliken & Martins, 1996). The majority of corporate governance studies emphasise that there is very limited participation by women on corporate boards (Huse & Solberg, 2006; Matsa & Miller, 2013; Milliken & Martins, 1996; van der Walt & Ingley, 2003). For example, Catalyst census shows that in the USA in 2001 there were only 12.4% women directors among Fortune 500 companies and overall 6.4% in UK companies in the same year (Singh & Vinnicombe, 2004). Based on the World Economic Forum's Global Gender Gap Report 2014, Mlambo-Ngcuka (2014), the UN Women Executive Director, states that progress on gender equality is very slow and shockingly, it may take another 81 years to reach gender parity in the workplace.²⁷

Even though Daily, Certo, and Dalton (2000) find similar results in the USA, they also note that women's representation on boards is gradually increasing because companies around the world are now under pressure to appoint female directors to their boards. In Fortune 500 firms, women's representation on corporate boards had grown to 15.2 in 2010 (Matsa & Miller, 2013). This is true, because Cann (2014) states that there has been only a small improvement in gender equality in the workplace after the nine years of measuring the global gender gap, and that progress remains uneven. There is still a long way to go. Many governance reforms stress²⁸ the importance of gender diversity in boards with a view that women on boards have potential to add value to firm performance in a significant way (Adams & Ferreira, 2009; Carter, Simkins, & Simpson, 2003; Erhardt, Werbel, & Shrader, 2003). In Norway, all public listed companies were required to increase female board membership to 40% in 2008 (Matsa & Miller, 2013). The Government of India has also moved through SEBI to prescribe rules requiring a minimum number of women on boards of Indian listed companies (Ministry of Law and Justice, 2013).

²⁷ However, the UN Commission on the Status of Women (CSW59) Session has set 2030 as the expiry date for gender inequality. See <http://www.unwomen.org/en/news/stories/2015/3/press-release-galvanizing-global-attention-world-leaders-celebrities-and-activists>

²⁸ Governance reforms in UK, Sweden, Norway and Spain have explicitly stressed the importance of gender diversity in the boardroom.

Accordingly, Clause 49 of the Listing Agreement in India emphasises that Indian corporate boards should have at least one woman director.

Gender is one of the most discussed issues, not only in the corporate governance research but also in political and societal environments (Mlambo-Ngcuka, 2014). In the 1980s and 1990s, women had more opportunities to enter corporate boards as the size of boards gradually increased (Bathula, 2008). Most women directors are not from the corporate sector but are usually outsiders or non-executive directors (Hillman, Cannella, & Harris, 2002). When compared with men, most women directors possess staff/support managerial skills, such as legal, public relations, human resources and communications rather than operating and marketing skills.

The relationship between women directors and firm performance has received ongoing attention (Ahern & Dittmar, 2012; Carter, Simkins, & Simpson, 2003; Farrell & Hersch, 2005; Liu, Wei, & Xie, 2014; Smith, Smith, & Verner, 2006). According to Smith et al. (2006), women directors on boards have a significant positive impact on firm performance. Carter et al. (2003) find a positive relationship between gender diversity and firm performance. Gender diversity in the top management of Fortune 500 firms is positively correlated with performance and stock valuation of those firms. Conversely, the mandatory quota²⁹ for female directors on corporate boards is negatively correlated with the performance of Norwegian firms (Ahern & Dittmar, 2012). A recent study of listed companies in Sri Lanka conducted by Hewa-Wellalage and Locke (2013) also finds a significant negative relationship between female directors and firm performance. The researchers explained that this result was because of the number of “silent” women directors who were wives of male directors. Farrell and Hersch (2005) were unable to find a relationship between firm performance and women directors on the board. The question of whether gender diversity assists firms to improve performance is one of the most debated issues in corporate governance and requires further exploration incorporating more contextual variables.

²⁹ The law mandate that at least 40% of female representation in Norwegian corporate boards.

3.10.3 Board size

Board size is the number of members serving on a company board. There is a belief that the number of directors can affect the performance of a company, especially its financial performance. This is supported by Cicero, Wintoki, and Yang (2008) who provide evidence that around two-thirds of USA firms are changing their board size due to its impact on firms activities. Also, some governance reforms mention the minimum and maximum number of directors that can constitute a board. According to the Direction No. 3 of 2008 on Corporate Governance for finance companies registered under the Finance Companies Act, the number of directors on finance company boards in Sri Lanka shall be no less than five and no more than 13 (CBSL, 2012b). For LSBs, the CBSL recommends that the number of directors on the board be no less than seven and no more than 13 (CBSL, 2013).

Various views in the corporate governance literature support the contention that board size has the potential to improve the performance of a company. Usually, resource dependency theory researchers argue that a larger board provides greater linkages to the external environment and improves company access to essential resources (Adams & Mehran, 2003; Coles, Daniel, & Naveen, 2008; Hillman & Dalziel, 2003; Klein, 1998; Pfeffer, 1972). A firm that is diversified in its operations and operates in multiple segments increases demand for expertise service for the CEO (Yermack, 1996). Due to the complexity of the organisation, the CEO of the organisation needs many advocates (Klein, 1998). Chaganti, Mahajan, and Sharma (1985) report that board size in successful companies is higher than those of failed companies, suggesting the existence of a positive relationship between board size and firm success (Chaganti et al., 1985; Coles et al., 2008; Yermack, 1996).

On the other hand, there is a volume of research supporting smaller boards. Persons (2006, p. 37) states that "... smaller board size is likely to be more effective in monitoring management" and is a determinant of audit committee independence (Klein, 2002). Chiang (2005, p. 96) observes that "Efficiency is reduced if the number of directors is too large because there is an increased difficulty in achieving agreement concerning decisions". As noted by Lipton and Lorsch (1992), smaller boards will, on average, have more group cohesiveness and provide more effective discussion for the firm. However, the ideal size of an MFI board depends on its

organisational responsibilities, strategic direction and its funding need. Also, an MFI board should have an odd number of members to avoid the possibility of having a tied vote (McConaghy, 2013).

Juran and Loudon (1966), in an earlier work, discard the relationship between board size and company performance. Thirty years later, Yermack (1996) and Eisenberg, Sundgren, and Wells (1998) find a negative relationship between board size and firm value in USA firms. Other researchers do not provide any support for a relationship between board size and firm performance (Bhagat & Black, 1999; Hermalin & Weisbach, 1991). Contrary evidence from Vafeas (1999) finds the number of board meetings held by a company is positively related to board size, which is consistent with resource dependency theory. There are other factors which influence board size, such as managerial ownership, firm age and takeover defence mechanisms (Boone, Field, Karpoff, & Raheja, 2007).

On balance, empirical research findings point toward an optimal board size of seven to eight people (Jensen, 1993; Lipton & Lorsch, 1992). Mersland and Strøm (2009) note in their MFI study that most MFIs have a board of seven to nine directors. In the Sri Lankan context, the average board size of listed non-financial companies is 7.6 (Hewa-Wellalage & Locke, 2011). According to Indian firm performance, board size is becoming an insignificant variable in determining the performance of Indian Public Sector Undertakings (Dey & Chauhan, 2009). On the other hand, Dwivedi and Jain (2005) in their study on board size and firm value suggest that larger boards improve the governance of firms, leading to lower agency cost and positive relationships with firm value. However, the right board size for a company is difficult to identify due to the sectorial and industrial differences. Clearly, the mixed results indicate the appropriate number of board members is a matter for continuing debate and needs further examination (Dalton et al., 1999; Hermalin & Weisbach, 2003; Jensen, 1993; Yermack, 1996).

3.10.4 Board independence

To achieve better firm performance, the proponents of agency theory suggest that the board of directors should be configured largely, if not exclusively, with independent directors, outside of management (Milliken & Martins, 1996; Muth &

Donaldson, 1998), which is typically required in many countries. For example, Lorsch and MacIver (1989) highlight that 74% of directors are outsiders and among them, 69% are non-management personnel with no other contacts with the organisation. Outside directors in India are defined as directors who are not paid employees of the company or do not have any family association with the company (Jackling & Johl, 2009, p. 506), which is a broad definition that summarises non-executive directors and independent directors in a firm. Clause 49 of the Listing Agreement by the SEBI describes the optimum combination of inside and outside directors for listed companies. For example, in a company with an executive chairman at least 50% of board members should be outside directors. This requirement comes down to 30% for companies having a non-executive chairman (SEBI, 2004).

The Listing Rules issued by the CSE require listed companies in Sri Lanka to maintain a proper mix of executive and non-executive directors on their boards. Therefore, boards should consist of a minimum of two non-executive directors or one third of the total number of directors, whichever is higher. According to the Banking Act Directions, the number of executive directors shall not exceed one third of the number of directors of a bank's board. Once there is compliance with the above rule, one of the executive directors can be appointed CEO of the bank. In addition, a bank's board should have at least three independent non-executive directors or one third of the total number of directors, whichever is higher (CBSL, 2013, p. 177). Finance Companies (corporate governance) Direction No. 3 of 2008 mentions that the number of executive directors in Sri Lankan finance companies shall not exceed one-half of the number of directors of the board. If the company complies with above rule then one of the executive directors can be appointed CEO of the company. Furthermore, the number of independent non-executive directors of the financial companies' board shall be at least one fourth of the total numbers of directors (CBSL, 2012b, p. 69).

It is assumed that outside directors provide more effective monitoring compared to inside directors. Lorsch and MacIver (1989, p. 17) state that "there has been a growing predominance of outside directors who are there not only to provide a new perspective to top management's thinking, but also to provide the necessary oversight only possible from an outsider". Mishra and Nielsen (1999, p. 22) find

that "... independent boards make greater use of compensation contracts to bring the financial interests of managers in line with those of shareholders". Abdullah (2004) states that boards of Malaysian companies are generally dominated by the outside directors and suggests that the structure of the board of directors is largely independent from its management due to the absence of any dominant personality. Furthermore, Cicero et al. (2008) also state that two-thirds of USA firms change their board's independence once in a two-year period.

Board independence plays an important role in developing countries and emerging markets as it is more effective in aligning the interests of managers and shareholders (Claessens & Yurtoglu, 2012). In Sri Lanka, investors are now highly concerned about non-executive directors on corporate boards. The corporate governance survey in Sri Lanka (2007) states that 87% of respondents consider balance between non-executive directors and executive directors is important in Sri Lankan listed companies. In the corporate governance survey in Sri Lanka (2007), more than 90% of participating companies had non-executive directors on their boards. Unlike Sri Lanka, this situation was not always there in India (Varma, 2005). In the Indian context, surprisingly, board independence is insignificant for firm performance across four categories of Indian firms: public sector undertakings, stand-alone firms, private business group affiliated firms and subsidiaries of foreign firms (Dey & Chauhan, 2009). Due to the surprising results of this study, its authors called for more detailed studies in this area. A study of top Indian companies showed that a greater proportion of outside directors on boards is associated with improved firm performance (Jackling & Johl, 2009). However, Kota and Tomar (2010) state that non-executive independent directors fail in their monitoring role. Chugh et al. (2011) identified that a high proportion of independent directors (excessively autonomous board) leads to lower firm performance.

Theoretically, from an agency perspective, it is claimed that a greater proportion of outside directors on the board should have a positive effect on performance. However, mixed results have been reported for the empirical studies undertaken on the relationship between outside directors and firm performance. Agency theorists argue that independent boards will increase firm performance (Dalton et al., 1998; Lynall, Golden, & Hillman, 2003; van den Berghe & Levrau, 2004). Uzun, Szewczyk, and Varma (2004, p. 33) state that the "... number of independent

outside directors increased on a board and in the board's audit and compensation committees, the likelihood of corporate wrongdoing decreased". In this regard, Dahya, Dimitrov, and McConnell (2008) report a positive relationship between firm performance and the proportion of outside directors. As illustrated by Dahya et al. (2008), there is a positive relationship between firm performance and the proportion of outside directors. However, some studies undertaken on corporate governance and firm performance find that there are no facts to confirm an independent board leads to enhanced firm performance (Bhagat & Bolton, 2008; Dahya et al., 2008). Meanwhile, Ashbaugh, Collins, and LaFond (2004) reported a negative relationship between the cost of equity and independence of a board. Therefore, it is important to investigate this factor further as there is general concession on the need for balance between inside and outside directors of the firm.

3.10.5 Duality

Duality occurs when the roles of CEO and chairman are carried out by the same person. Due to the recent spate of large corporate scandals in the USA, CEO/chair duality acquired more attention as many CEOs abused their power for their own benefit. Efendi, Srivastava, and Swanson (2007) state that the board of directors in restarting firms which have the CEO as chairperson are "... more likely to give the CEO a salary increase that is not warranted by the firm's performance" (p.3). Their finding is required to ensure that these deficiencies in oversight are likely to increase organisational costs and subsequently lower organisational performance (Brockmann, Hoffman, & Dawley, 2006). However, Faleye (2007, p. 240) stated that "in 2001, there were only three shareholder proposals calling for the separation of CEO and chairman positions. In contrast, there were 20 such proposals in 2003 and 32 in 2004".

As a result, corporate governance regulators put more pressure on companies to separate CEO and chairman roles. After the corporate governance reforms in India, having a number of outside directors on a board has addressed the challenge of duality in listed companies (SEBI, 2004). For example, Clause 49 of the Listing Agreements requires 50% outside directors on the board if there is a full-time chairman on the board. This unique characteristic of corporate governance implies

that the duality issue has been closely considered by Indian regulators who argued that the majority of the board should be represented by outside directors in order to balance the power and authority of the company. Abdullah (2004) finds that generally Malaysian companies practise a non-dual leadership structure.

In Sri Lanka, directions on corporate governance issued by the CBSL suggest that the LSBs separate the roles of chair and CEO; they should not be performed by the same individual. The directions also state that the chairperson shall be a non-executive director, preferably an independent director. When the chair is not an independent non-executive director, the board may designate an independent non-executive director as the senior director to ensure a greater independence of the company (CBSL, 2013). Similar conditions are applicable for RFCs in Sri Lanka (CBSL, 2012b, pp. 67-68).

Proponents of agency theory have suggested splitting the role of CEO and chairman (Dalton et al., 1998; Jensen, 1993; Muth & Donaldson, 1998) because the main role of the corporate board chairperson is to appraise the performance of top management (Jackling & Johl, 2009). If the function of the chair is to hire, fire, evaluate and compensate the CEO, then this role cannot be successfully fulfilled if both roles are combined and are under the control of the CEO (Jensen, 1993). For example, a CEO who is also the chairperson of the board receives more salary than a CEO who does not hold both positions. The reason for the higher compensation level is that the board of directors of the company is hired and removed by the CEO of the company and therefore they set a favourable compensation level for their CEO (Core, Holthausen, & Larcker, 1999). Further, Carcello and Nagy (2004) propose that when the CEO of the company holds the position of chairman it will "... yield significant internal influence and power and may have the wherewithal to orchestrate a financial fraud" (p.13).

However, the proponents of stewardship theory argue that managers make decisions that are in the best interest of the organisation, even when their interests are not aligned with the principals' interest. Stewardship theory suggests that stewards work hard to maximise organisational performance with the objective of getting benefit from a strong organisation. Based on stewardship theory, it is evident that a CEO doubling as board chairman leads to higher firm performance (Donaldson &

Davis, 1991). The researchers highlight that duality can create strong leadership for the organisation and provide a clear sense of strategic decision making. If the roles are separated then the decision making will be ineffective.

To the contrary, empirical studies report mixed findings relating to CEO duality. Fama and Jensen (1983) suggest that splitting the role of chairman and CEO improves performance, whereas other studies report no relationship between CEO duality and firm performance. Chen, Chen, and Wei (2006) assert that when firms transform their leadership structure from duality to non-duality, there is no evidence of improved firm performance. The studies conducted for short-run performance found that the USA market is indifferent to change in a firm's duality status (Baliga et al., 1996). Kiel and Nicholson (2003, p. 202) find that the issue of CEO duality might be contingent on a company's size and challenges. Although the empirical findings on duality and firm performance have mixed results, the agency theory approach adopted in this study establishes it as a key issue that does need more investigation.

3.10.6 Internal audit function

Boards of directors in a firm, as an internal governance mechanism, help to monitor and, if necessary, control management behaviour on behalf of the shareholders (Cornforth & Edwards, 1999; Dalton et al., 1998; Hillman & Dalziel, 2003; Huse, 2007; John & Senbet, 1998). To achieve this task, a board of directors needs an independent viewpoint of the organisational operations, which may be achieved by having a proper internal audit function in the organisation.

The execution of the internal audit function is highlighted in several papers (Antoine, 2004; Goodwin & Kent, 2004; McCollum, 2006) and governance reports (Institute of Internal Auditors Professional Guidance, 2002; NYSE, 2002) as a mechanism for improving companies' internal governance. Furthermore, prior studies have established the fact that an effective internal audit function is critical to the success of a company (Carcello, Hermanson, & Raghunandan, 2005; Sarens et al., 2012). An emphasis on internal auditing has increased noticeably since 2001. In response to world-famous corporate scandals, regulators took steps requiring companies to have an internal audit function. For example, the NYSE amended its

listing requirements by mandating that all listed companies have an internal audit function.

The firm's internal audit function is an internal governance mechanism and it links with firm performance. The internal auditor's functions are to offer firms an independent assurance to evaluate and improve the effectiveness of risk management, control and governance processes (Institute of Internal Auditors, 2012). Therefore, an internal audit function in firms can be performed by having a separate internal audit department, an internal entity that fulfils the role of internal auditor, or an outsourced provider (Carcello et al., 2005). The significance of an internal audit function is becoming appreciated in boardrooms and newsrooms, by investors, analysts and regulators (Antoine, 2004). If the internal auditor reports directly to the board and is independent, then good accountability and transparency will prevail (Mersland & Strøm, 2009; Sinclair, 2012).

Even though there are rigorous accounting standards, supervision of accounting statements is essential as it reflects a true and fair picture of the firm. Internal supervision can check and verify the accounts randomly with the objective of ensuring sound information in the statements provided by management and detecting any misrepresentation or fraud in accounting processes. Companies whose accounts are found not to be appropriately disclosed can be penalised or prosecuted for violations. Supervisors can disclose negligence in a variety of ways, ranging from warnings, display through the website and through rating agencies, to disbarring directors from serving on boards and increased monitoring of management to prevent them conducting further frauds (Rajan & Shah, 2005). This internal supervision is not limited to a specific type of institution. It is important to all institutional sectors. When an economy becomes more competitive and the financial activities become more sophisticated, the risk of conducting financial activities becomes more difficult to measure. Accordingly, supervision of financial sector institutions is essential as most of the supervision should undertake internally (their own supervision system) rather than externally (external audit).

3.11 Conclusion

Chapter 3 first presented the evolution of corporate governance as an introduction to the literature review on corporate governance and then an overview of the definitions pertaining to corporate governance. The chapter then explains the role of corporate governance for entity performance. The general information in the chapter provides a brief summary of how corporate governance has changed and developed overtime in the world, especially in developed countries. To develop a research model it is important to identify the theories relating to that model. However, prior research on corporate governance utilises multiple theories and offer different lenses to understand the board governance. This chapter reviewed six theories in corporate governance; agency theory, stewardship theory, stakeholder theory, institutional theory, legitimacy theory and resource dependency theory which helped identify and develop the corporate governance characteristics for this study. The link between corporate governance theories and the variables to be tested is reported in Table 3.11-1.

Table 3.11-1: Link between corporate governance theories and variables

Theories	Expected signs for corporate governance variables					
	Board Diversity	Gender Diversity	Board Size	Board Independence	Duality	Internal Audit Function
Agency theory	+	+	-	+	-	+
Stewardship theory	-	-	+	-	+	-
Stakeholder theory	+	+	+/-	+/-	-	+
Institutional theory	+	+	+/-	+	-	+
Resource dependency theory	+	+	+	+	-	+
Legitimacy theory	+	+	+/-	+	-	+

An overview of empirical implications of corporate governance was presented and then followed by a brief discussion of corporate governance system developments

in Sri Lanka and India. This discussion helps in understanding the development of regulations that support the corporate governance systems in those countries. Chapter 3 also explains the nature of corporate governance practices and their impact on the microfinance sector as a whole. The chapter proceeds to examine relevant empirical studies pertaining to the relationship between corporate governance practices and firm performance in relation to six corporate governance characteristics. Finally, the chapter provides a broad overview of the corporate governance practices and their impact on MFI financial performance and outreach.

CHAPTER FOUR

HYPOTHESES AND EMPIRICAL RESEARCH MODEL DEVELOPMENT

4.1 Introduction

The previous chapter noted that boards of directors, their membership, and directors' performance are all important matters that are impacted when changes in legislation or new codes of best practice are proposed or issued. Prior research investigating the relationship between corporate governance practices and firm performance have lacked consensus in conclusions. Some have reported evidence of corporate governance leading to an increase in firm performance, while others have reported corporate governance practices leading to a decline in performance. Other research suggests little or no evidence to support a relationship between corporate governance and firm performance.

The inconclusive and ambiguous empirical evidence concerning corporate governance and firm performance may be attributable to different estimation methods used, lack of controls for other factors that influence results and a number of other unobserved factors not considered (Smith et al., 2006). Most studies have focused on developed markets and large enterprises. Research reveals that legal, cultural and socio-economic dissimilarities in individual countries may affect corporate governance practices among countries (Aslan & Kumar, 2014; Globerman, Peng, & Shapiro, 2011; Kumar & Zattoni, 2013). Globerman et al. (2011, pp. 1-2) state that "one needs to understand the institutional framework in which organisations operate in order to understand the rationale for and consequences of specific corporate governance models". Therefore, it is evident that corporate governance practices are very much related to the country, its history, industry and the nature of the firms.

Since the focus of prior research has been on publicly listed companies, both the nature of corporate governance practised by MFIs and its impact on performance is less understood. No studies exist based on multiple MFI outcomes over a number

of years in South Asia. Research relating to MFIs has focused on innovative lending technologies to increase lending to the poor, and impacts on borrowers' welfare. The focus of this study is to identify significant corporate governance factors that have potential to influence the financial performance and outreach of MFIs. Similar to publicly listed companies, good corporate governance practices in MFIs will also enhance the financial performance and outreach (Bassem, 2009; Cull et al., 2007; Hartarska, 2005; Hartarska & Nadolnyak, 2007; Mersland, 2009). As a result, it is important to determine whether corporate governance practices impact MFI performance, which will eventually contribute to MFIs' sustainability in the long run. Therefore, the investigation of corporate governance practices and performance of MFIs in Sri Lanka and India could contribute to a better understanding of corporate governance practices relating to the sector and also in the context of unique institutional settings.

Chapter 4 presents the empirical model of the thesis and discussion of the variables drawn from the theoretical perspectives of Chapter 3. Chapter 4 is structured as follows: Section 4.2 develops the hypotheses based on the theoretical and empirical links between corporate governance and MFI performance. This study considers a series of hypotheses which are developed based on the research questions that are related to the relationship between independent and dependent variables. Section 4.3 presents the conceptual framework and section 4.4, 4.5 and 4.6 explain the independent, dependent and control variables used in this study, respectively. Finally, section 4.7 concludes the chapter.

4.2 Hypotheses Development

MFIs need good corporate governance practices to make their microfinance activities more transparent and sustainable (Barry & Tacneng, 2014; Caudill et al., 2009) because good corporate governance increases monitoring efficiency of the organisation. Proponents of agency theory argue that the board of directors has a responsibility to ensure the survival and success of the organisation (Gabrielsson & Huse, 2004, p. 29). The role of the board of directors is to rectify and monitor critical decisions, ensure controls are in place to minimise the potential abuse of delegation, evaluate the company performance and strategies, and ensure funds are

not expropriated (Davis et al., 1997; Fama & Jensen, 1983; Huse & Rindova, 2001; Shleifer & Vishny, 1997).

In this regard, prior research has identified a number of different board characteristics as important mechanisms that have potential to promote good corporate governance, such as board size (de Andres et al., 2005), board composition (Kiel & Nicholson, 2003), board diversity (Mersland, 2009), gender diversity (Erhardt et al., 2003), CEO/chairman duality (Dey et al., 2011) and internal audit function (Bassem, 2009; Sarens et al., 2012). These variables fit within an agency theory perspective of financial performance and outreach, and determination of their respective and joint impact in MFIs is important. While respecting the evidence, there may be negative or no effects in relation to these variables, it is appropriate to investigate the variables' impact in the MFI context. Therefore, the following board characteristics are modelled into this research to examine the impact they have on the performance of MFIs, financially and in outreach in Sri Lanka and India.

4.2.1 Gender diversity

Gender diversity of management staff and board members is an important indicator for good corporate governance (Smith et al., 2006) because management teams of heterogeneous composition are more likely to make decisions by evaluating more alternatives than homogenous boards or management groups. Women directors can bring different experiences from men to the board, from their working and non-working lives. They also have better understanding of some segments of the market place and are able to take quality decisions. MFIs serve women clients to a large extent and many MFIs are run mostly by women. Strøm, D'Espallier, and Mersland (2014) observe that women make up a comparatively large proportion of customers, top management and boards of directors in MFIs. Mersland and Strøm (2009) and Strøm et al. (2014) find that women managers and directors induce a higher MFI performance as they can better understand the opportunities and challenges of the markets they serve. When an MFI is matched with a leadership that has the same traits (gender) then it will perform better. Strøm et al. (2014, p. 61) state that MFIs favouring women clients are matched with female leadership. Iskenderian (2013,

October 3) suggests that “in order to be the best place for women customers, an institution [MFI] should be the best workplace for women employees and women leaders”.

Governance studies on the relationship between gender diversity and firm performance provide ambiguous predictions (Erhardt et al., 2003; Hewa-Wellalage & Locke, 2013; Marinova et al., 2010; Milliken & Martins, 1996; Rose, 2007). Smith et al. (2006), using data for 2,500 large Danish firms during the period 1993-2001, indicate that women in top management jobs and on boards of directors tend to have a significant positive impact on firm performance. Among small capital companies in New Zealand, Reddy, Locke, Scrimgeour, and Gunasekarage (2008) find a significant positive relationship between female directors on the board and financial performance. In the MFI context, Bassem (2009) and Chakrabarty and Bass (2014) note that board diversity with a higher percentage of women enhances MFI performance by lowering operating costs, where Mersland and Strøm (2009) pinpoint that the financial performance of MFIs improves with a female CEO.

However, Marinova et al. (2010) studied 102 Dutch- and 84 Danish-listed firms and find gender diversity has no effect on firm performance. Similarly, Rose (2007) did not find a significant relationship between gender diversity and firm performance from a cross sectional analysis of all Danish companies listed on the Copenhagen Stock Exchange from 1998 to 2001. After a study of 240 YMCA organisations, Siciliano (1996) highlights that gender diversity has a positive impact on social performance, but a negative impact on the amount of funds received. In an Asian context, Bonn, Yoshikawa, and Phan (2004) report mixed evidence in Japan and Australia after comparing the impact of female directors on the board and firm performance.

Based on the indication given by empirical studies, it is important to further explore the impact of gender diversity of boards on MFI performance as it may lead to better corporate governance, provide diverse viewpoints, values and new ideas for boards and provoke lively boardroom discussions (Daily, Certo, & Dalton, 1999; Huse & Solberg, 2006; Singh & Vinnicombe, 2004). As predicted by agency and resource dependency theories, this study argues that MFI boards are likely to have a high

level of gender diversity and proposes the first three hypotheses relating to gender diversity in MFI top management and boards as:

Female Board Members

H1_a: There is a positive relationship between the number of female directors on the board and the financial performance of MFIs

H1_b: There is a positive relationship between the number of female directors on the board and the outreach of MFIs

Female CEO

H2_a: There is a positive relationship between a female CEO and the financial performance of MFIs

H2_b: There is a positive relationship between a female CEO and the outreach of MFIs

Female Chair

H3_a: There is a positive relationship between a female chairperson on the board and the financial performance of MFIs

H3_b: There is a positive relationship between a female chairperson on the board and the outreach of MFIs

4.2.2 Duality

CEO/chairman influence on the board is recognised as duality, which is one of the important practices in corporate governance. Agency theoreticians highlight the separation of the role of CEO and chairperson (Dalton et al., 1998; Jensen, 1993; Muth & Donaldson, 1998). Fama and Jensen (1983) state that non-duality firms, which separate the decision and risk-bearing functions can control for agency problems. CEO duality restricts the independence of board and reduces the ability of boards to perform their oversight and governance roles (Millstein & Katsh, 2003). Similarly, Ryan and Wiggins (2004) state that if a CEO is not the chairperson then firms reduce their percentage of executive directors. Webb (2004, p. 271) emphasises that "... a board more likely to protect shareholders from agency problems, would be one with separate individuals controlling the firm and the

board". Heenetigala (2011) states, based on 37 companies from the top 50 CSE listed companies in Sri Lanka, that there is a positive relationship between separate leadership and ROE.

However, some studies have reported that there is no relationship between CEO duality and firm performance (Chen et al., 2006). Based on the study conducted in Indian firms, Chugh et al. (2011) state that CEO duality does not create any quantifiable synergies in financial performance among Indian firms, as combined positions create agency costs and lower the ROA, and is not consistent with stewardship theory. The empirical results of a sample of public and private banks operating in India show that there is no relationship between the separation of CEO and chairman roles and firm performance in relation to ROA and ROE (Pandya, 2011). Jackling and Johl (2009) report similar findings from a sample of 180 top listed companies in India. In the MFI context, Mersland and Strøm (2009) comment that CEO/chairman duality has a positive influence on MFI portfolio yield and credit clients but a negative influence on average operational self-sufficiency (OSS)³⁰, ROA and loan size. Further, they highlight that they cannot prove whether the MFI is better governed when the CEO and chairman are separate. Therefore, it is important to use this characteristic to understand the power of an MFI, whether both important positions belong to one person or not.

The influence of CEO/chairman on the board is used to clarify the impact on firms' performance. However, studies that examine this relationship reach inconsistent results. Although the empirical research findings on duality and firm performance are mixed, the agency theory approach adopted in this study points to a key issue that requires more investigation. Companies with CEO/chairman duality can restrict the independence of the board, control the information given to the board, and increase the board's ineffectiveness when discharging its monitoring duties. Similar reasoning can be applied to the microfinance industry where CEO/chairman duality has a negative effect on firm performance due to the tremendous powers in duality (Allen & Gale, 2000). Based on the above mentioned empirical studies on duality, this study proposes the following hypotheses:

³⁰ OSS is widely used for measuring the MFIs' financial performance.

H4_a: There is a negative relationship between duality and the financial performance of MFIs

H4_b: There is a negative relationship between duality and the outreach of MFIs

4.2.3 Board diversity

Lapenu and Pierret (2006) state that the scope of the governance discussion on MFIs should be broadened to include the involvement of all stakeholders, such as employees, managers, elected officials, clients, donors, bank partners, shareholders, the government, etc. Therefore, stakeholder analysis approaches of MFI governance are rather more important than the restrictive approaches like shareholder analysis. Proponents of institutional theory, legitimacy theory and stakeholder theory emphasise the importance of having different stakeholders involvement in decision-making as it helps to maximise the interest of all the stakeholders in an organisation. Incorporating representatives from stakeholders on the MFI board enhances the board diversity too.

One of the main characteristics in board diversity is directors' nationality. International directors on the board increase the managerial expertise, creativity and innovation of boards (García-Meca et al., 2015). Non-profit MFIs are mainly promoted by international/donor organisations as they devote significant resources to microfinance activities and they represent the vertical dimension of the firm network (Mersland, 2009). Large donors in non-profit organisations act in a similar way to blockholders in for-profit organisations by ensuring that the organisation's resources are used in an effective manner (de Andrés-Alonso, Romero-Merino, & Cruz, 2006). Frumkin and Kim (2001) state that large donors act like efficient monitors with their skill and power by demanding detailed plans, budgets and information for each project, even though these investments may offer minimum returns but have a social value. Therefore, one of the main stakeholders in an MFI is the representative of international/donor agencies as the MFI is highly dependent on the donors' funds (CGAP, 2006). However, Mersland and Strøm (2009) report that when boards comprise international directors, MFI performance can still fall.

Mersland (2009) argues that it is important to have client representation on MFI boards as they are also one of the major stakeholders. Incorporation of client representatives, who represent the horizontal dimension of the MFI network, to the MFI board increases board diversity and is also valuable for MFI performance. Research has identified that diversified boards tend to produce unique information sets for management and reduce the information asymmetry, which results in effective and efficient decisions (Carter, D'Souza, Simkins, & Simpson, 2010; García-Meca et al., 2015). Client representatives on MFI boards tend to give more precise information on market behaviour and its demand for MFI loan products.

Therefore, having stakeholder representation on boards enables organisations to have better understanding of the environment in which they operate (Letza et al., 2004, p. 242). However, stakeholders, such as international/donors representatives, and customers are generally absent from MFI boards yet they are important to consider as they represent the vertical and horizontal relationship with the MFI network (Mersland & Strøm, 2009). Furthermore, as per stakeholder theory, MFIs can deal with their managerial, legal and social constraints with the support and interaction of stakeholders in the firm as they affect a firm's long term success (Freeman & Reed, 1983; Letza et al., 2004). As emphasised in resource dependency theory (Pfeffer & Salancik, 1978), it would be beneficial for MFIs to invite their major international/donor representatives and clients' representatives to sit on their boards to make effective decisions for MFI success. Based on the above theoretical and empirical justification, this study proposes the following hypotheses relating to board diversity:

International/donor directors

H5_a: There is a positive relationship between international/donor representatives on the board and the financial performance of MFIs

H5_b: There is a positive relationship between international/donor representatives on the board and the outreach of MFIs

Directors representing clients

H6_a: There is a positive relationship between directors representing clients and the financial performance of MFIs

H_{6b}: There is a positive relationship between directors representing clients and the outreach of MFIs

4.2.4 Board independence

Corporate governance actions in a firm encompass constructing the optimal mix of inside and outside directors on the board (Morin & Jarrell, 2001). Lapenu and Pierret (2006) highlight the tradeoffs between outreach and financial performance of MFIs, finding tradeoffs to be influenced by stakeholders' representation on the board and providing strong support for independent boards with limited employee participation. Based on agency theory, the answer relating to the effect of board independence on firm performance is undetermined.

Empirical studies report mixed results regarding the relationship between the proportion of independent directors and firm performance (Bhagat & Bolton, 2008; Dahya et al., 2008). For example, Dahya et al. (2008) and Rosenstein and Wyatt (1990) have reported a positive relationship whereas Agrawal and Knoeber (1996) report a significant negative relationship between outside members on the board and firm performance. Hermalin and Weisbach (2003) point out that there is little cross-sectional relationship between board composition and firm value. Kiel and Nicholson (2003) do not find any evidence of a positive relationship between the proportion of outside directors and the market-based measure of firm performance. Chatterjee (2011) states that board independence is insignificant across all categories of Indian firms: public sector undertakings, stand-alone firms, private business groups, affiliated firms, and subsidiaries of foreign firms.

In an MFI context, Hartarska (2005) uses rated and unrated MFIs in Eastern Europe to investigate the relationship between corporate governance and MFI success. Her analysis indicates that more independent directors provide a better ROA whereas lower financial performance and outreach show when executive directors operate MFIs. Similarly, Kyereboah-Coleman and Osei (2008) observe that MFI boards with independent directors have a positive impact both on profitability and outreach. In line with agency theory and the findings of prior studies relating to MFIs, the proposed hypotheses connecting to outside directors and firm performance are:

H7_a: There is a positive relationship between non-executive directors on the board and the financial performance of MFIs

H7_b: There is a positive relationship between non-executive directors on the board and the outreach of MFIs

4.2.5 Board size

Predictions from the previous empirical evidence are ambiguous on the board size variable and deliver mixed results. A number of scholars have contended that larger boards have their benefits. When board size increases, firm performance also goes up as more board members provide greater monitoring and advice, and make available better linkages to the external environment (Adams & Mehran, 2003; Coles et al., 2008; Hillman & Dalziel, 2003; Klein, 1998; Pfeffer, 1972). It is easier for larger boards to monitor their managers' activities more effectively, but it would be difficult for the CEO to control the board (Pearce & Zahra, 1989). Smaller board sizes produce a result for lower profitability and decreased firm value (Eisenberg et al., 1998). In contrast, Yermack (1996) and Eisenberg et al. (1998) report evidence of an inverse relationship between board size and firm performance in USA firms whereas Hermalin and Weisbach (1991) propose that there is no relationship between board size and firm performance.

Since firms differ by size, industry and sector, it is hard to determine the right board size. In non-profit organisations, research indicates that a higher number of trustees makes it easier to deal with operational issues while having more control over operating activities (Oster & O'Regan, 2002). For this reason, Tinkelman (1999) suggests that charitable organisations can improve their efficiency with larger boards as they have extra duties, such as supervision of fundraising. Bassem (2009) and Kyereboah-Coleman and Osei (2008) argue that large boards with a range of expertise are able to provide better performance for MFIs. Also, larger boards are found to be hard for powerful CEOs to dominate. The larger board size is likely to be associated with lower costs as members provide voluntary services. To the contrary, Hartarska (2005) finds that larger boards are associated with lower performance for MFIs, which will be reflected in lower OSS and ROA, due to less effective monitoring. It can be argued that larger board size is associated with free

volunteer time, reducing cost for MFIs and alternatively it reduces ROA due to monitoring issues. Mersland and Strøm (2009) do not find significant relationship between board size and performance. Arguably, the ideal size of an MFI board depends on its organisational responsibilities, strategic direction and its funding need. McConaghy (2013) suggests that MFI boards should have an odd number of members to avoid tied votes.

The optimal size of boards in firms has been continually debated because research to date provides mixed results (Hermalin & Weisbach, 2003; Jensen, 1993; Yermack, 1996). Empirical studies in India also report mixed results. For example, Chatterjee (2011) argues that larger boards are less effective for Indian firms whereas Jackling and Johl (2009) find that larger boards in top Indian companies provide greater exposure to external resources and improve firm performance. Nonetheless, larger boards are less effective for the performance of other Indian firms, such as stand-alone firms, private business group affiliated firms and subsidiaries of foreign firms (Dey & Chauhan, 2009). Kota and Tomar (2010) also find similar results in 106 mid-sized firms in India between 2005 and 2007. In a Sri Lankan context, Hewa-Wellalage, Locke, and Scrimgeour (2012) find a significant positive relationship between the board size and family firms' financial performance. It is difficult to find a consensus perspective regarding the relationship between board size and MFI performance in Sri Lanka and India. However, larger boards tend to provide greater opportunities to raise funds, offer more linkages with local communities, and link the organisation to its environment more than smaller boards do (Pfeffer, 1973). Given the positive relationship between board size and MFI performance predicted by resource dependency theory, this study proposes the hypotheses as follows:

H8_a: There is a positive relationship between board size and the financial performance of MFIs

H8_b: There is a positive relationship between board size and the outreach of MFIs

4.2.6 Internal audit function

Investors may be less hesitant and more inclined to invest in a company that has an internal audit function, believing the financial statements are less likely to be materially misstated. According to the Corporate Governance Survey in Sri Lanka (2007), 96% of senior executives rely on the functioning of the audit committee to ensure good corporate governance in Sri Lankan companies. The internal audit function is not limited to a specific type of institution as it is perceived as identifying problem areas and helping to avoid major collapse (Bassem, 2009). Bassem (2009) and Mersland and Strøm (2009) highlight that audited financial statements improve MFI performance. Strøm et al. (2014) emphasise that internal auditing means more monitoring and when it links with the board, it can provide more independent information to the directors.

There has been an increase in regulatory attention given to internal auditing over the years and still more needs to be known about its existence in firms (Carcello et al., 2005) and the extent of its influence on firm performance, especially for the microfinance sector (Bassem, 2009). Sinha (2012) comments that Indian for-profit MFIs that are controlled by promoter shareholders have inadequate internal checks and balances for executive decision-making. MFIs that fail to present sound internal supervisory systems end up reducing the investors' and donors' confidence in the institution.

Bassem (2009) and Mersland and Strøm (2009) state that the impact of an internal audit function on MFI performance needs to be subject to further examination. The internal audit functions in MFIs provide more transparency and accountability for stakeholders, which is a significant value to donors and investors. Selecting the firm's internal auditor is an internal governance mechanism and it links with firm performance. It appears that the internal audit function is a good mechanism for effective supervision to enhance MFI performance:

H9_a: There is a positive relationship between the internal audit function and the financial performance of MFIs

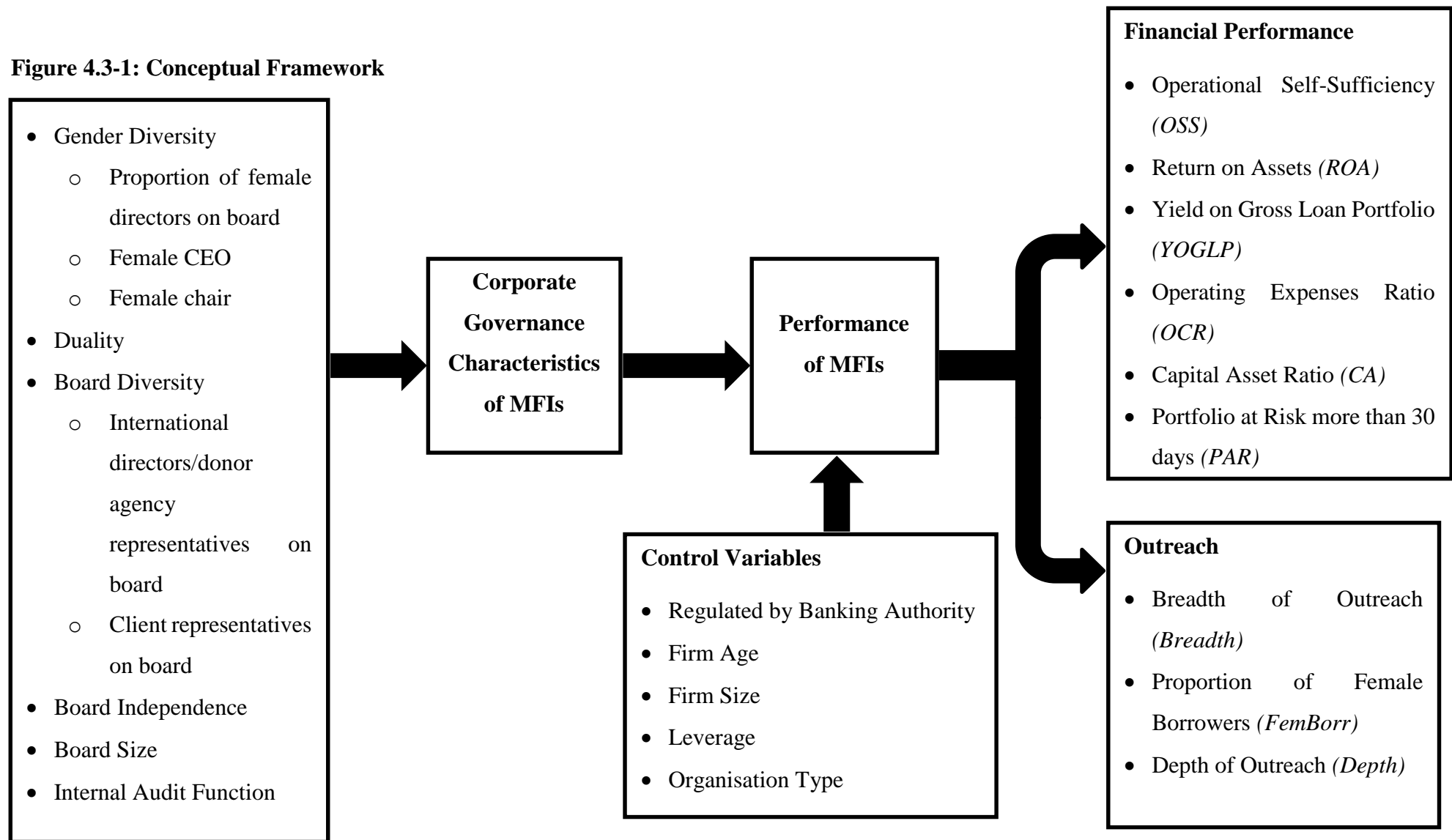
H9_b: There is a positive relationship between the internal audit function and the outreach of MFIs

4.3 Conceptual Framework

The conceptual framework of this study is based on the theoretical and empirical research on corporate governance practices that contribute to the improvement of financial performance and outreach of MFIs in Sri Lanka and India. Figure 4.3-1 depicts the conceptual framework for this study.

The left hand side of Figure 4.3-1 presents the corporate governance variables for the study, derived from prior studies, governance principles and practice guidelines. Performance variables that are linked with corporate governance variables are illustrated on the right hand side of Figure 4.3-1. The performance variables of this study are twofold; financial performance and outreach. Consideration is given in this study to MFIs that are regulated by the banking authority, firm age, firm size, leverage and organisation type. These are the control variables because the relationship between corporate governance and MFI performance may potentially be affected by the firm and industry-specific factors in India and Sri Lanka. Due to the organisational, economical and socio-cultural differences, it is certain that the impact of corporate governance on MFI performance in Sri Lanka may vary from the performance of MFIs in India.

Figure 4.3-1: Conceptual Framework



4.4 Independent Variables

In order to understand the corporate governance and MFI performance variables in Sri Lanka and India, it is necessary to identify the key corporate governance practices that contribute to the performance of MFIs in these countries. The independent variables employed in this study are related to the theoretical and empirical studies that have identified important corporate governance mechanisms that impact on firm performance. Furthermore, the variables in the prior studies reflect either a positive or negative impact. This study examines variables for which previous studies have reported mixed results in relation to performance in companies. A brief description of the independent variables is given as follows.

4.4.1 Gender diversity

The gender diversity variable of this study contains three sub variables; female directors on boards, female CEO and female chair.

4.4.1.1 Proportion of female directors on board

Proportion of female directors on board (*FemDir*) is based on the number of female directors divided by total board size. In recent articles on gender diversity, female representation on boards has attracted attention as part of advocacy initiatives for women's equal rights. It is suggested that female directors on boards are more efficient and are more active monitors than male directors (Adams & Ferreira, 2009). Liu et al. (2014) find corporate boards with three or more female directors have a strong impact on firm performance when compared with those with fewer. However, female representation on corporate boards is very low and various efforts have been undertaken to increase their number on corporate boards (Adams & Ferreira, 2009).

With regard to the microfinance industry, women's leadership grasps more attention than traditional firms as women borrowers are a specially targeted clientele of MFIs and they are very successful in serving women clients (Aggarwal, Goodell, & Selleck, 2015; Strøm et al., 2014). As a result, these institutions are highly operated by women employees and the female proportion of directors is

much higher than the corresponding figures in other industries. For example, Strøm et al. (2014) state that around 29% of the all board seats are held by women, which is a reasonably high number when compared to other types of firms. Therefore, this study uses the *FemDir* variable to identify its impact on MFI performance.

4.4.1.2 Female CEO

A potentially important variable of MFI governance studies is female leadership. To a great extent, microfinance is a business for women, run by women. Strøm et al. (2014) state that 27% of CEOs in their sample are females. It is suggested that women leaders are a good communicating channel to connect with their female customers and women in the labour force due to their different life experiences and perspectives (Liu et al., 2014). Furthermore, prior research points out that the firms with female executives make better decisions and create better value for their shareholders than their male counterparts (Huang & Kisgen, 2013).

Liu et al. (2014) state that female executive directors have a strong positive effect on firm performance. Investors also react more favourably to major corporate finance decisions made by firms with female executives (Huang & Kisgen, 2013, p. 835). Similarly, in the MFI industry Strøm et al. (2014) and Mersland and Strøm (2009) find a positive relationship between female CEO and MFI performance. Therefore, it is important to include the female CEO (*FemCEO*) variable for governance studies in microfinance sector. The *FemCEO* of this study is measured as a dummy variable by indicating a value of one, if the CEO of MFI is a woman, otherwise zero.

4.4.1.3 Female chair

Female chair (*FemChair*) highlights whether a female director chairs the board. Liu et al. (2014) find that 4.1% of board chairs are held by a female from a panel of over 2000 Chinese listed firms for the period 1999–2011. This situation differs in the microfinance sector. A global panel of 329 MFIs in 73 countries indicates that 23% of the MFIs have a female as chair (Strøm et al., 2014). Furthermore, they reveal that a female chair is positively related to MFI performance. It is important

to know whether the female chair can improve the performance of MFIs in Sri Lanka and India. *FemChair* is used to find the relationship between governance and performance of MFIs. It is recorded as a dummy variable which equals one when the board chair is a female and zero otherwise.

4.4.2 Duality

In examining the relationship between governance and performance, *Duality* has been taken into account as a key board governance indicator (Kyereboah-Coleman & Osei, 2008). CEO/chair duality measures whether the CEO and board chairperson roles are held by the same person. If it is held by the same person, then the value takes one and zero otherwise. Berle and Means (1932) argue that the separation of ownership and control of corporations reduces managers' incentives to maximise corporate efficiency, which gives an indication that for MFIs, the CEO and chair should be the same person. However, proponents of agency theory argue it is necessary to separate the roles. When both roles are combined, it may lead to conflicts of interest and higher agency costs. It is prudent to examine the duality in the context MFIs' performance evaluation.

4.4.3 Board diversity

Board diversity in this study consists of two variables, viz, international director and/or donor agency representatives on the MFI board, and client representatives on the board.

4.4.3.1 International directors/donor agency representatives on board

The unique nature of the microfinance board is that it includes different stakeholders, such as donors, creditors and clients. It is important to examine the impact of international/donor agency representatives on MFI performance for evidence as to whether diversity improves performance. International directors/donor agency representative on board (*IntDorDir*) is recorded as a value of one if the firm has at least one international and/or donor director on board, otherwise zero. This variable has been recognised by prior studies in the MFI sector

(Hartarska, 2005; Mersland & Strøm, 2009). Hartarska (2005) illustrates how MFIs with more donor representatives have better outreach but worse OSS as they highly focus on increasing outreach to the undeserved people at their own cost (fund).

4.4.3.2 Client representatives on board

There is discussion in the microfinance industry about whether MFI boards should have client representatives (*ClientDir*), as evidence suggests that board diversity improves firm performance (García-Meca et al., 2015; Hartarska, 2005). Proponents argue that client representatives on MFI boards help to provide precise information on the target market. Others argue that client representatives weaken the MFI operation. Therefore, it is important to evaluate the role of these directors on the MFI board to see whether a mix of board member skills can affect the efficiency of board decisions and ultimately, firm performance. *ClientDir* takes the value of one if there is a client director on the MFI board, otherwise zero.

4.4.4 Board independence

Empirical studies illustrate that the quality of the board depends on board independence (Bhagat & Jefferis, 2002; Hartarska, 2005) asserting that independent directors, who are not employees in the organisation, can act as better monitors (Hartarska, 2005). Normally, banks have a larger proportion of outside directors than other companies (Adams & Mehran, 2003). MFIs may be similar to banks. When the firm has a large number of outside directors then the board is more independent (Kyereboah-Coleman & Osei, 2008). The proportion of independent directors is an important characteristic for board governance as it helps MFIs with effective monitoring. However, prior studies found both positive and negative relationships between governance and performance. Based on the agency theory perspective, the expected coefficient for this study is positive for both financial performance and outreach. Board independence for this study is measured based on the percentage of the total number of non-executive directors divided by the total number of board directors (*IndDir*).

4.4.5 Board size

Board size (*Bsize*) is an important measure of board efficiency and it has obtained a higher rank among corporate governance variables in prior studies investigating firm performance (Kyereboah-Coleman & Osei, 2008). Financial intermediaries often have large boards and they tend to be less effective (Adams & Mehran, 2003). However, Hartarska (2005) highlights that the impact of board size on performance is not clear for non-profit firms. It is suggested that non-profit and charitable entities need to have larger boards due to the extra duties of members in relation to supervision and fundraising (Oster & O'Regan, 2002; Tinkelman, 1999). Bassem (2009) and Kyereboah-Coleman and Osei (2008) clarify that MFIs need large boards to have better performance. *Bsize* is the number of members on the board and is included as a corporate governance characteristic for this study.

4.4.6 Internal audit function

The internal audit function (*IntAudit*) in MFIs can provide more independent information to the board for goal fulfilment (Strøm et al., 2014). Internal auditing helps to reduce the information asymmetries among stakeholders. Unlike traditional firms, most MFIs do not have true owners and are highly dependent on donor funds. When the microfinance industry grows, the competition for donations also grows. Donor agencies rely on the information that is disclosed under rules and regulations (Hartarska, 2005) and benefit from independent and effective supervision of MFI activities (Bassem, 2009). When the MFI has an internal audit function, it appears there is more monitoring of MFI activities, which is a good corporate governance indicator. Strøm et al. (2014) highlight less internal audit in MFIs strengthens CEOs' power position. However, the impact of internal audit on MFI performance has not gained much attention in prior studies. *IntAudit* takes the value of one if the MFI has an internal audit function and otherwise zero.

4.5 Dependent Variables

MFIs work similarly to traditional banks and financial intermediaries (Aggarwal et al., 2015; Hartarska, 2005) as they collect money and lend to people; the major

difference is their target markets. MFIs lend small amounts of money to people who are not in a position to borrow from the formal banking sector, as they do not have sufficient collateral to obtain loans (Morduch, 1999). The formal financial sector refuses to take the risk of lending to poor or low income people. Another difference is that unlike traditional banks, MFIs accept grants from donor agents and generally do not depend on customer deposits (Aggarwal et al., 2015). Even though these MFIs and traditional banks have some differences both are dealing with the funds of depositors or donors. MFIs' performance need monitoring to ensure there is adequate accountability. Their performance can be measured through tools that have been used to measure traditional banking performance but those tools need to be adapted for the MFI context.

Mainly from within the banking literature, there are two approaches to assess the bank performance (Yong & Christos, 2012). One is focused on the efficiency estimation using non-parametric data envelopment analysis or parametric stochastic frontier analysis (Casu & Molyneux, 2003; Chen & Chiu, 2011; Fiordelisi, Marques-Ibanez, & Molyneux, 2011). In the second approach a large number of studies in the literature have investigated the determinants of bank profitability by using financial ratios, such as ROA, ROE and the net interest margin (de Andres & Vallelado, 2008; Goddard, Molyneux, & Wilson, 2004; Karim, Mohamed Sami, & Hichem, 2010; Kundid, Skrabic, & Ercegovac, 2011; Poghosyan & Fungáčová, 2011; Srdjan & Ognjen, 2010; Wong & Zhou, 2008).

Unlike traditional banks, MFIs are a special form of financial institution. They need to fulfil the expectations of agents who grant money and other providers of funds to MFIs because they may value the social aspects more than the financial aspects. Contributors want to be sure their funds have been used according to the intended purposes. Therefore, MFIs have to fulfil the twofold objectives or double bottom lines of achieving sustainable financial performance and outreach (Aggarwal et al., 2015; Gutiérrez-Nieto, Serrano-Cinca, & Mar Molinero, 2007). In MFI literature, scholars try to investigate the performance determinants of MFIs by taking into account both of these aspects. Since MFIs are established as non-listed firms, it is important to use accounting indicators to measure performance (Tchakoute-Tchuigoua, 2010). Market performance measures are not feasible (Strøm et al., 2014). In this study, the core MFI performance indicators recommended by CGAP

(2006) in Good Practice Guidelines for Funders and by Rosenberg (2009) in a Technical Guide are used as the basic tools to measure the MFI performance. In addition, variables suggested in prior empirical research are utilised to better understand MFI performance.

4.5.1 Financial performance measures

Empirical measures of the financial performance of MFIs have included profitability and viability indicators (Cull et al., 2007; Hartarska, 2005; Mersland & Strøm, 2008; Mersland & Strøm, 2009; Tchakoute-Tchuigoua, 2010). As this study's sample comprises different institutional forms of MFIs, it is important to adopt a common set of performance indicators to measure financial performance. This will help interpretation and comparison among the MFIs. This study uses Operational Self-Sufficiency (*OSS*), Return on Assets (*ROA*), Yield on Gross Loan Portfolio (*YOGLP*), Operating Cost Ratio (*OCR*), Capital Asset Ratio (*CA*) and Portfolio at Risk (*PAR*) more than 30 days, as metrics of financial performance. A summary of various indicators used to measure the financial performance of MFIs follows.

4.5.1.1 Operational self-sufficiency (*OSS*)

Operational self-sufficiency (*OSS*), the most frequently observed performance measure is used to quantify MFIs' institutional performance and sustainability (Bassem, 2009; Hartarska, 2005; Mersland & Strøm, 2009). MFIs require sufficient operating income to cover operational costs such as salaries, loan losses, and other administrative costs. *OSS* measures how well an MFI covers its costs, through revenues, by comparing financial revenue with financial and operating expenses, including provision for loan impairment (Lin & Ahlin, 2011; Nawaz, 2010). According to Strøm et al. (2014, p. 63) *OSS* is "free from bias resulting from different capital structure, access to subsidised funding and possible differences in default policies in the MFI". Sometimes this measure is also referred to as operational sustainability and is calculated as:

$OSS = \text{financial revenue} / (\text{financial expenses} + \text{loan loss provision expenses} + \text{operating expenses})$

4.5.1.2 Return on assets (ROA)

Return on assets (*ROA*) measures the ability of the MFI to utilise its total assets to generate returns (Microfinance Consensus Guidelines, 2003) or to determine how effectively the MFI's management generates earnings from its investments. Unlike *ROE*, *ROA* measures the profitability of MFIs without considering the financial structure of the institution (Bruett, 2005; Tchakoute-Tchuigoua, 2010).

The most commonly used profitability measure for banking and commercial institutions is *ROA* (Gutiérrez-Nieto et al., 2007; Rosenberg, 2009). Many microfinance studies use *ROA* for a financial performance measure to show how it is going to be impacted by the corporate governance (Barry & Tacneng, 2014; Hartarska, 2005; Mersland & Strøm, 2009; Strøm et al., 2014). *ROA* uses net income after taxes but before donations, which is a non-operating income, as the numerator, and total assets for the period as the denominator. It shows how an MFI is profitable relating to its total assets, expressed as a percentage. *ROA* for this study is calculated as:

$$ROA = \frac{\text{Net income after taxes and before donations}}{\text{Total Assets}}$$

4.5.1.3 Yield on gross loan portfolio (YOGLP)

Yield on gross loan portfolio (*YOGLP*), which is also known as portfolio yield, is an indicator of the loan portfolio's ability to generate financial revenue from interest, fees and commissions (Microfinance Consensus Guidelines, 2003). According to Gutiérrez-Nieto et al. (2007) profitability of MFIs can be measured through the *YOGLP*.

$$YOGLP = \frac{\text{Interest on loan portfolio} + \text{fees and commissions on loan portfolio}}{\text{Gross Loan Portfolio}}$$

4.5.1.4 Operating expenses ratio (OCR)

Operating expenses ratio (*OCR*) is the most commonly used indicator for efficiency and productivity of MFIs (Barry & Tacneng, 2014; Gutiérrez-Nieto et al., 2007) as it measures how well the MFI masters its operations (Mersland & Urgeghe, 2011), and is also known as operating cost ratio (Rosenberg, 2009). This proxy of financial performance measures the MFI's administrative efficiency by comparing total operating costs to the average gross loan portfolio or to the total assets.

The most appropriate denominator for calculating the *OCR* is total assets. The reason for selecting total assets relates to the consideration of number of loans and loan size which could impact *OCR*. For example, if MFIs provide small loans to borrowers, then their operation cost is high due to the loan processing (loan preliminary assessment cost, site visit cost, loan application cost, etc.), loan monitoring expenditure (client visit cost, loan collection cost, such as fuel, and reimbursement, etc.). Technically, gross loan portfolio represents the portfolio of micro loan credit. However, there are circumstances where some MFIs provide other services, including micro savings³¹, micro business consultation, in which the amount is not represented in the gross loan portfolio. In that instance, it is unfavourable to compare operating cost against gross loan portfolio as it does not represent other savings balance which remains in the total assets.

Total assets are viewed as the most appropriate measure to mitigate disadvantage of such distortion as total assets represents gross loan portfolio, savings and other nature of assets³² which have been generated to disburse micro loan credit (Microfinance Consensus Guidelines, 2003; Rosenberg, 2009). A low ratio implies that the institution is more profitable and shows its ability to cover its costs

³¹ MFIs retain clients' savings in their liability and corresponding cash received on client savings are deposited in banks as term deposits. However, significant personal cost is paid for monitoring clients' savings, which include under the administrative expenditure.

³² Usually, MFIs use loan tracing systems (IT software) for monitoring credit. The value of loan tracking system is recorded under the intangible assets and amortised within specified period. That amortised cost includes under administrative expenditure. Also MFIs have given motor vehicles for their loan officers to collect repayments. Associated cost on vehicle, such as fuel, vehicle maintenance are included in the administrative expenditure.

effectively, which is strongly related to the sustainability of the MFI. *OCR* of this study is calculated as:

$$OCR = \frac{\text{Annualised Operating Expenses}}{\text{Total assets}}$$

4.5.1.5 Capital asset ratio (CA)

Capital asset ratio (*CA*) provides information on the capital structure of an MFI and it signals its capital strength. *CA* ratio measures an institution's resiliency against both expected and unexpected losses. This is an important factor in determining risk in financial institutions, particularly in banks (Karim et al., 2010; Tulchin, Sassman, & Wolkomir, 2009) as an explanatory variable, which indicates the risk that the institution has when there is insufficient capital to continue its operations.

The proportion of total assets financed by the MFI's equity capital is explained by the *CA* ratio (Bruett, 2005; Tulchin et al., 2009). They point out that *CA* ratio as an important measure for MFI performance in the framework for reporting, analysis and monitoring of MFI performance. Also Tchakoute-Tchuigoua (2010) and Gutiérrez-Nieto et al. (2007) have identified the *CA* ratio as a MFI performance measure. Institutions with higher capital assets ratios have low leverage levels and, therefore, less risk which reduces the cost of capital and increases profitability of the firm. The higher *CA* signifies that the institution is better positioned to meet its financial obligations and addresses an unexpected losses (Tulchin et al., 2009). Normally, the expected coefficient for capital asset ratio is a positive coefficient.

It is important for an institution to comply with internally set or externally prescribed minimum capital standards, especially for financial institutions where it is calculated as a percentage of equity in relation to risk-weighted assets. Bank supervisors in Latin American countries set the limit of capital adequacy between 8% and 11% (Jansson, 2003), however in Sri Lanka, where the banks are regulated under the Central Bank's capital adequacy ratio, the requirement is between 14% and 20% (CBSL, 2012a). In India, banks are required to maintain a minimum capital adequacy ratio of 9% on an on-going basis, however, non-bank subsidiaries are required to maintain the capital adequacy ratio prescribed by their respective

regulators (RBI, 2013). New RBI norms required NBFCs to have a capital adequacy ratio of 12% by April 2014.

Banks with more equity capital operate more efficiently than banks with less capital (Kwan & Eisenbeis, 1997) because they can amply offset the risk of potential losses with equity capital. This situation is relevant for other types of financial institutions such as MFIs. Accordingly, this study uses *CA* to measure MFIs' financial performance. *CA* is calculated by using total equity capital to total assets (Tulchin et al., 2009).

$$CA = \frac{\text{Total Equity}}{\text{Total Assets}}$$

4.5.1.6 Portfolio at risk more than 30 days (PAR)

Portfolio at risk is the standard international measure as well as the most widely accepted measure of portfolio quality in the banking and MFI sectors (Gutiérrez-Nieto et al., 2007; Rosenberg, 2009). The loan portfolio is the main source of risk for financial institutions as it is the largest asset (Mersland & Urgeghe, 2011). The repayment of loans is a vital indicator of their performance. The strong repayment patterns emphasise that the loans are of real value to the client.

Portfolio at risk (*PAR*) means the value of outstanding loan balances that are past due by at least one day (excluding the interest receivable on the loan, but including the entire unpaid principal balance) and have not yet been written off (Microfinance Consensus Guidelines, 2003). In microfinance, 30 days is a common breakpoint (Rosenberg, 2009, p. 6) and the most widely used *PAR* ratio (Mersland & Urgeghe, 2011, p. 7). This measure reflects the percentage of gross loan portfolio at risk of non-repayment by including the complete outstanding balance of loans that have payments in arrears of more than 30 days (Rosenberg, 1999). In this calculation, the value of restructured loans is also included. As a rule of thumb, *PAR* above 10% must be reduced quickly because a decreasing *PAR* is a positive signal for financial sustainability and low delinquency. *PAR* which is more than 30 days is calculated (Rosenberg, 1999) as:

$$PAR = \frac{\text{Outstanding balance of portfolio overdue borrowers for more than 30 days}}{\text{Gross Loan Portfolio for Borrowers}}$$

4.5.2 Outreach measures

Lafourcade, Isern, Mwangi, and Brown (2006) emphasise outreach as “efforts to extend microfinance services to the people who are underserved by financial institutions”. In simple terms, most studies refer to outreach of MFIs as the number of clients now served (Caudill et al., 2009; Cull et al., 2007; Hartarska & Nadolnyak, 2007; Mersland & Strøm, 2009). However, Meyer (2002) expresses the view that outreach is a multidimensional concept and different dimensions are needed to measure it, such as the value of the loan portfolio, average loan size, depth of reach, worth of users, cost to users, breadth, length and scope, among others. Navajas, Schreiner, Meyer, Gonzalez-vega, and Rodriguez-meza (2000) similarly indicate that there are six aspects for measuring outreach: depth, worth of users, cost to users, breadth, length and scope. However, obtaining measurable and robustness data to measure social impact of MFIs is difficult (Mersland & Urgeghe, 2011). In the microfinance literature, a number of variables are proposed to measure the outreach of MFIs. This study uses three measures, which are common outreach variables: total number of active clients (*Breadth* of outreach), *Depth* of outreach and the proportion of female clients served by the MFI.

4.5.2.1 Breadth of outreach (*Breadth*)

The breadth of outreach is calculated as the number of people to whom the MFI provides loans, or the number of borrowers over a specific period of time who currently have an outstanding loan balance with the MFI (Microfinance Consensus Guidelines, 2003; Quayes, 2012; Schreiner, 2002). These calculations of active clients do not include borrowers whose loans have been written off. This variable has been used in most of the governance and performance studies of microfinance enterprises (Barry & Tacneng, 2014; Bassem, 2009; Hartarska, 2005; Mersland & Strøm, 2009). Due to the high level of dispersion between the minimum and maximum number, this study uses the natural logarithm value of the number of active borrowers in the MFI (*Breadth*).

4.5.2.2 Women borrowers (*FemBorr*)

Traditionally, MFIs have tried to achieve deeper outreach by targeting people who are most vulnerable, such as women (Lafourcade et al., 2006) and the fourth World Conference on Women, at Beijing in 1995, declared that 70% of the world's poor were women (Freeman, 1996). Once women in the world are empowered, they contribute to the economic growth and sustainable livelihoods of their families and communities. As a result, women's empowerment through microfinance is identified as a key component in promoting the International Labour Organisation's (ILO) Decent Work Agenda (ILO, 2009, p. 4). Many MFIs, in some cases exclusively, target female clients to make this contribution and ultimately contribute to the ILO core values of greater gender equality and non-discrimination.

The wider discussion on gender and the role of finance recognises that when women have opportunities to raise their productivity, then households, firms, communities and whole economies perform significantly better and accelerate their growth (ILO, 2009). In Latin American and Caribbean countries, even though they have relatively well developed capital markets, the biggest regional weakness is access to finance. Formal financial products are lacking and women are underprivileged by traditional credit scoring models that rely on credit history and collateral (Lee, 2013, September 30). There is continuing recognition that it is important to concentrate on women borrowers because females continue to remain a symbol of poorest of the poor and vulnerable population, based on evidence of prior studies.

The success of microfinance highly depends on lending to female clients as they are the largest market (Aggarwal et al., 2015; Armendariz & Morduch, 2005). MIX market data analysis shows that most MFIs targeted women borrowers (74%) while half of them declare women empowerment and gender equality as their objective (Iskenderian, 2013, October 3; Women's World Banking, 2013). A survey of 13 countries in Latin America and the Caribbean suggest that women are strongly motivated to start businesses (Lee, 2013, September 30). When compared to men, the women are generally viewed as reliable re-payers and more loyal clients (Aggarwal et al., 2015). The study shows that women clients exhibit lower portfolio at risk than men at all loan sizes and a higher retention rate, which is around 68% (Iskenderian, 2013, October 3).

According to Quayes (2012), “outreach to women is measured by the number of women borrowers as a fraction of the total number of borrowers”. This is an important indicator to measure MFI performance (Aggarwal et al., 2015) as women entrepreneurs face significant barriers when accessing financial services and MFIs can facilitate overcoming barriers as a key part of their mission (Women’s World Banking, 2013). In 2011, Women’s World Banking launched the Gender Performance Initiative to evaluate how effectively MFIs are serving women, to demonstrate the benefits of financial inclusion for women. They have subsequently launched a comprehensive tool to track the gender performance of their firms (Iskenderian, 2013, October 3). This study uses percentage of women borrowers to the total number of active borrowers (*FemBorr*) to measure the outreach of MFIs.

4.5.2.3 Depth of outreach (Depth)

Depth of outreach refers to "the value the society attaches to the net gain from the use of the micro credit by a given borrower" (Navajas et al., 2000, p. 335). Quayes (2012, p. 3423) pronounces that “access of credit disbursement to poor people, wherein the poorer the borrowers are the greater is the depth of outreach”. This measure evaluates how well MFIs reach the very poor and focuses on poverty lending within a specific context by comparing the loan size to the Gross National Income (GNI)³³ per capita of a country. With the development of the microfinance sector more attention focuses on the overall social outreach of the sector (Barry & Tacneng, 2014).

A higher value of depth indicates that they serve a lesser number of poor clients (Hartarska, 2005). From a poverty-alleviation perspective, the preferred value for this variable should be a smaller value (Bassem, 2009). The MicroBanking Bulletin defines the poorest microentrepreneurs or “low-end” clients as those with a depth of outreach less than 20% or an average outstanding loan balance which is less than USD 150. However, low account sizes do not guarantee a focus on low income

³³ GNI comprises with the total value of goods and services produced within a country which is known as GDP, plus its income received from other countries, less similar payments made to other countries. See World Bank website to get GNI values for countries. <http://data.worldbank.org/indicator/NY.GNP.ATLS.CD> (See also Rosenberg, 2009).

clientele, and as a result, this is a very rough proxy for the poverty level of borrowers at a given time period (Rosenberg, 2009). However, due to a lack of data more sophisticated indicators are not available.

The variable is usually presented as a percentage by weighting the GNI per capita (Barry & Tacneng, 2014), which is calculated based on GNI divided by mid-year population. Instead of GNI per capita, some studies use GDP per capita to measure the Depth of outreach (Bassem, 2009; Hartarska, 2005).

Depth = Average outstanding loan balance per client

GNI per capita

Even though, GNI per capita is the only measure available for comparative studies among countries, it is not an ideal measure of income as it is skewed by high inequalities in income distribution (Lafourcade et al., 2006). When computing this ratio, rather than taking the reported GNI per capita, the figure can be transformed to account for real impact for poor people, making it more useful. Based on the available data about the income disparity in each country, an adjusted GNI per capita excluding the outlier impact on high income is proposed.

Sri Lankan GNI per capita calculation as an example:

According to the inequality of income distribution, the top 20% of the population has the large percentage of income (Weede, 1981). Therefore, this study excludes the outliers in the income distribution and calculates adjusted GNI per capita for Sri Lanka by distributing 45.9% of the income among the bottom 80% of the population.

The following steps to exclude the impact of inequalities in income distribution and calculating adjusted GNI per capita value are (See Table 4.5-1),

1. From the total population, 20% as the highest income component is excluded.

2. From the total GNI value, income that is distributed among the top 20% of wealthy people in the country, i.e. 54.1%³⁴ is excluded.
3. To calculate adjusted GNI per capita income, the adjusted GNI is divided by adjusted mid-year population.

Table 4.5-1: GNI per capita in Sri Lanka

Year	GNI per capita (LKR)	Adjusted GNI per capita (LKR)
2007	176,893	101,346
2008	212,972	122,193
2009	233,716	134,095
2010	267,967	153,746
2011	310,124	177,933
2012	365,699	209,821

A similar method is applied to Indian GNI per capita calculations and Table 4.5-2 presents the GNI per capita before and after the adjustment.

Table 4.5-2: GNI per capita in India

Year	GNI per capita (INR)	Adjusted GNI per capita (INR)
2007	42,306	30,481
2008	47,001	33,864
2009	53,321	38,418
2010	62,987	45,382
2011	71,673	51,640
2012	77,225	55,641

³⁴ This upper quintile value is extracted from the Department of Census and Statistics - Household Income and Expenditure Survey 2009/10 report. See page no. 5 of <http://www.statistics.gov.lk/Newsletters/HIES200910FinalBuletin.pdf> and page no. 8 and 9 of http://www.statistics.gov.lk/HIES/HIES2009_10FinalReportEng.pdf

4.6 Control Variables

There are variables that affect the performance of MFIs other than the corporate governance variables. It is important to consider these control variables.

4.6.1 Regulated by banking authority (*Regbank*)

MFIs are diverse in character and can operate as regulated or unregulated institutions (Hartarska & Mersland, 2009). Regulatory status is an important institutional control variable for MFI studies (Mersland & Strøm, 2009; Strøm et al., 2014) and it can impact MFI performance because the presence of sound regulation can change the design of an internal governance mechanism of an organisation (Adams & Mehran, 2003; Hartarska & Mersland, 2009). Regulation by a banking authority may be positively related with profitability due to implicit regulatory protection or it might reduce profitable opportunities or increase cost. Cross country studies on MFIs reveal that regulatory status or regulatory power of the supervisory body has no effect on MFI financial performance and outreach (Hartarska, 2009; Mersland & Strøm, 2009). A different finding is suggested by Hartarska and Nadolnyak (2007) based on data from 114 MFIs in 62 countries, including one Sri Lankan MFI and 13 from India. They emphasise that there is an indirect effect of regulatory status on MFI outreach (the number of borrowers). This study considers regulation by banking authority as a control variable. Regulated by a banking authority is coded as a dummy variable taking the value of one where the MFI is regulated by a banking authority (*Regbank*), such as CBSL or RBI, otherwise zero.

4.6.2 Firm age (*Fage*)

Number of years in operation (*Fage*) is an important control variable (Liu et al., 2014) and it has been used by prior MFI governance and performance studies (Barry & Tacneng, 2014; Kyereboah-Coleman & Osei, 2008; Mersland & Strøm, 2009; Strøm et al., 2014). As an MFI matures in age it tends to learn what governance mechanisms work best for the institution and how to achieve profitability through it. That MFIs perform better with age, as they have more experienced staff than

newly established MFIs, is testable. This study calculates *Fage* control variable by using the number of years of operation in the microfinance industry.

4.6.3 Firm size (*Fsize*)

MFI and bank governance literature employs firm size as a control variable (Kosmidou, 2008; Strøm et al., 2014) to capture any scale effect and has been noted as important in the relationship between corporate governance and financial performance (Hovey, Li, & Naughton, 2003). In general, the size of bank relates positively to profitability (Karim et al., 2010; Kosmidou, 2008). This is consistent with the argument that the large banks obtain benefits from economies of scale (low cost) and their economic scope, having a diversified range of loans and other products (Karim et al., 2010). Also, they lend money to clients with lower risk profiles which increases their profits. They may gain higher market power through stronger brand name or sound regulatory protection (Goddard et al., 2004). However, there is no prior expectation developed for bank size in the South Asian context (Perera, Skully, & Chaudrey, 2013).

It is expected that larger MFIs tend to adopt more formal governance mechanisms than smaller MFIs as they need to monitor their complex operational activities more effectively and efficiently. A large MFI performs better as it has more funds, resources and opportunities to diversify its loan portfolio (Barry & Tacneng, 2014; Chakrabarty & Bass, 2014). This study uses MFI size as a control variable. Scholars have used different proxies to measure the firm size, such as total assets, fixed assets, annual sales, paid up capital, shareholder equity and the market value of the firm. Consistent with prior studies in the MFI context (Barry & Tacneng, 2014; Chakrabarty & Bass, 2014; Hartarska, 2005; Mersland & Strøm, 2009) natural logarithm of an MFI's total assets (*Fsize*) is used for MFI size.

4.6.4 Leverage ratio (*Lev*)

The leverage ratio compares the total debt to total assets in a firm (Liu et al., 2014) and it helps give an idea of the proportion of MFI assets financed by debt. When an MFI has a low proportion of debt then this implies that the MFI is less dependent

on the money borrowed from outside. This ratio is used to check the long-term solvency of the MFI. In general, if an MFI has higher leverage ratio then the MFI has more risk in continuing operations. This ratio controls the leverage level of an MFI and large MFIs tends to acquire more debts than small MFIs. The leverage (*Lev*) ratio is calculated by dividing the MFI's total debt by the total assets.

$$\text{Leverage Ratio} = \frac{\text{Total debts}}{\text{Total assets}}$$

4.6.5 Organisation type (*Orgtype*)

A study by Kosmidou, Pasiouras, and Tsaklanganos (2007) for 19 Greek bank subsidiaries operating in 11 nations (including UK, USA, Canada and South Africa) covering the period 1995 to 2001 shows privately owned banks generate more profit than government owned banks. This argument is true in developing countries like those in South Asia (Perera et al., 2013) as most government bank lending is supported by government direct credit programmes, with interest rate ceilings and other bank-specific regulations imposed by the government. Varma (2005, p. 200) points out that “the ability of the domestic financial institutions to play a role in corporate governance is constrained by their ownership structure”.

Ownership types of MFIs varies as there are diverse legal incorporations in microfinance sector (Hartarska, 2005). MFIs in this study are also diversely incorporated and this circumstance is similar in other countries (Hartarska & Mersland, 2009). They are registered as NGOs, private banks, NBFIs or member-owned co-operatives. Hartarska (2005) and Strøm et al. (2014) use different types of MFI as a firm specific control variable to find the link between governance and MFI performance. It is appropriate to consider the impact of organisation type; whether the MFI is a non-profit organisation, for-profit organisation, member-based co-operative, or shareholder owned firm as a variable to control for firm heterogeneity.

Many policy papers report that the most appropriate ownership type for MFIs is a shareholder firm that can be regulated by the banking authorities and remain independent from donors (Christen & Rosenberg, 2000; Hardy, Holden, & Prokopenko, 2003; Jansson, Rosales, & Westley, 2004). Such MFIs are able to

benefit from corporate governance too. This underlines a need to transform non-profit MFIs to for-profit ownership (Ledgerwood & White, 2006). A trend toward MFIs commercialising their institutions from non-profit to for-profit, based on a belief that shareholder firms can perform better than non-profit organisations (Hardy et al., 2003; Ledgerwood & White, 2006), is apparent. It is further suggested they can provide low-cost credit to greater outreach (Varottil, 2012). However, Mersland (2009) and Sinclair (2012) highlight that there is minimal difference between shareholder owned MFI performance and other MFI performance. Mersland and Strøm (2009) reveal that ownership of MFIs does not directly impact performance. Due to the ambiguous evidence suggested in prior research, this study employs organisation type (*Orgtype*) variable as a control variable to mitigate its effect on the link between governance and MFI performance.

Table 4.6-1: Definitions of dependent, independent and control variables

Variables	Acronym	Predicted Sign	Definition
Dependent Variables			
Financial Performance Variables			
Operating self-sufficiency	<i>OSS</i>		Operating self-sufficiency is the total financial revenue divided by the financial expenses, loan loss provision expenses and operating expenses.
Return on assets	<i>ROA</i>		Return on assets is the net income after tax and before donations divided by the total assets.
Yield on gross loan portfolio	<i>YOGLP</i>		Yield on gross loan portfolio is the interest on loan portfolio and fees and commissions on loan portfolio divided by the gross loan portfolio.
Operating expense	<i>OCR</i>		The operating expenses/cost is the operating expenses divided by the total assets.
Capital to Asset	<i>CA</i>		Capital to asset is the total capital divided by the total assets.
Portfolio at risk more than 30 days	<i>PAR</i>		The portfolio at risk more than 30 days is the loans that are more than 30 days divided by the gross loan portfolio for borrowers.
Outreach Variables			
Breadth of Outreach	<i>Breadth</i>		The natural logarithm of the number of active borrowers in the MFI.
Percentage of female borrowers	<i>FemBorr</i>		The ratio of female borrowers to total number of active borrowers.
Depth of Outreach	<i>Depth</i>		The average loan balance per borrower divided by the adjusted GNI per capita.
Independent Variables			
Percentage of female directors	<i>FemDir</i>	Positive (+)	The ratio of female directors to total number of directors on the board.
Female CEO	<i>FemCEO</i>	Positive (+)	Dummy explanatory variable that takes a value of one if the CEO of the firm is a female.
Female chairperson	<i>FemChair</i>	Positive (+)	Dummy explanatory variable that takes a value of one if the chairperson of the firm is a female.
Duality	<i>Duality</i>	Negative (-)	Dummy explanatory variable that takes a value of one if the firm's CEO and chairperson are same.
Board of directors who represent international and/or donors agencies of the firm	<i>IntDorDir</i>	Positive (+)	Dummy explanatory variable that takes a value of one if the firm has at least one international and/or donor director on board.
Board of directors who represent clients/borrowers of the firm	<i>ClientDir</i>	Positive (+)	Dummy explanatory variable that takes a value of one if the firm has at least one director representing clients/borrowers of the firm.
Non-executive directors on board	<i>IndDir</i>	Positive (+)	The ratio of non-executive directors on the board to total number of directors on the board.
Board size	<i>Bsize</i>	Positive (+)	The total number of directors on the board.
Internal auditor	<i>IntAudit</i>	Positive (+)	Dummy explanatory variable that takes a value of one if the firm has an internal auditor reporting to the board.
Control Variables			
Regulated by banking authority	<i>Regbank</i>		Dummy variable that takes a value of one if the firm regulated by banking authority in the country.
Firm Age	<i>Fage</i>		The natural logarithm of the number of years from the date of establishment as an MFI.
Firm size	<i>Fsize</i>		The natural logarithm of the firm's total assets.
Leverage	<i>Lev</i>		The ratio of the firm's total debt to its total assets.
Organisation type dummy variables	<i>Orgtype</i>		Dummy variables for each of the organisation type: NGO-MFIs, NBFCs, Co-operatives, Credit Unions, Rural Banks, Urban Co-operative Banks, Private Companies.
Year dummy variables	<i>year</i>		Six year dummies for each of the years from 2007 to 2012.

4.7 Conclusion

Sustainability of MFIs emphasises not only the financial viability of the organisations but also transparent and efficient organisations that are accepted by all the stakeholders involved in the organisation. Most of these requirements can be achieved through good corporate governance. However, the empirical studies relating to good corporate governance practices of MFIs are still in their infancy and further studies are needed to find out how improved corporate governance practices may increase profitability and sustainability of MFIs.

This chapter provides a rational description of the corporate governance characteristics used in the empirical model and their relationship with firm performance by developing the nine hypotheses to be tested in three analysis chapters. These hypotheses will facilitate the understandings of the corporate governance mechanisms in MFIs in Sri Lanka and India. This chapter presents the conceptual framework of this study in relation to the developed hypotheses. Based on the conceptual framework, the dependent and control variables used in the study are explained. The next chapter demonstrates the data collection method and econometric methods that are used for testing the hypotheses.

CHAPTER FIVE

DATA COLLECTION AND RESEARCH METHOD

5.1 Introduction

This chapter explains the research method used to investigate the research questions, the data collection process, the empirical model and research techniques used in this study. Corporate governance has been extensively investigated in for-profit sectors but there are limited prior studies focusing on the corporate governance of MFIs. The link between corporate governance and MFI performance remains unexplained. This study investigates empirically the nexus between corporate governance practices and MFI performance.

This study has adopted diverse research methods to determine an appropriate research method which is suitable for the study of corporate governance of MFIs. This enables researcher to decide the research philosophy, empirical data and analysis techniques to come from the findings of the research. A panel data analysis approach is used to search for patterns in MFI data which are collected over time for the same organisations and then a regression is run to identify the association between governance and performance of MFIs.

5.2 Research Method

The research questions have guided the methodological and method approach followed in this study. As Saunders, Lewis, and Thornhill (2007) note, the most important determinant of the research philosophy depends on research questions. To find the linkage between governance and performance requires looking at the data, the research which points to a positivism methodology, which is a critical and objective-based method to examine the research issue. The positivism research philosophy of human knowledge is extended when people come to rely on empirical data, reason and the development of scientific laws to explain phenomena (Bernard, 2013, p. 16). There is a concentration on quantifiable observations and the use of statistical methods to evaluate the results. The research method for this study is

quantitative and data analysis techniques are based on secondary data collected from several sources. Quantitative research outlines a distinctive research strategy which is described as:

“entailing the collection of numerical data, as exhibiting a view of the relationship between theory and research as deductive and a predilection for a natural science approach (and of positivism in particular), and as having an objectivist conception of social reality” (Bryman, 2012, p. 160).

5.3 Data Collection Process

The data collection process begins with the identification of a suitable definition for the MFIs in Sri Lanka and India. Data are obtained from various sources which may require cleaning and editing in order to process a consolidated dataset for each country. It is necessary to test for missing data and outliers in the dataset to maximise consistency and reliability of the database. Finally, diagnostic testing is performed before applying the linear regression model to see if the regression model is appropriate.

5.3.1 MFI definition

There is no universal accepted definition for MFIs. It is important to develop a working definition for MFIs in this study for the convenience of data collection. As noted in Chapter 2 above, scholars, governments, policy makers and various institutions (ADB, 2000; Armendariz & Labie, 2011; Burkett & Sheehan, 2009; Helms, 2006; Hudon, 2008; LMFPFA, 2015; RBI, 2011; Robinson, 2001) have developed different definitions for the microfinance sector. The MIX market classifies financial institutions as MFIs when the average outstanding loan balance is less than 250% of GNI per capita (Rosenberg, 2009). Definitions of MFIs vary from country to country, region to region. Therefore, to conduct an empirical investigation of the MFI sector, it is important to have a precise definition to operationalise the data analysis process, because most of the given characteristics in the different definitions cannot be operationalised in the real world. After considering the narratives given by different scholars, this study has taken into

account the following benchmarks to select the institutions that need to be included in the data collection.

This study confines the focus to institutions that predominantly have a mission to provide credit to poor or low-income individuals and groups with the following attributes:

- Dedicated towards alleviating poverty by supporting low income people to come out of poverty
- Offer easy access to credit for people who are unable to obtain credit at a reasonable rate from traditional sources without collateral
- Enable women's empowerment by lending mostly to women
- Provide small amounts of credit for short time periods which require repayment at concessionary interest rates
- Generally, lend money for income-generating activities, although loans are given for consumption, housing and other activities

There are some other categories of financial institutions such as ICs, leasing companies and pawnshops which do not merely provide credit/loans to poor or low-income people with no collateral, but provide services by acting as an insurance agent, agriculture adviser, and household product agent. This study employs data of MFIs which are generating more than 75% of income from lending loans than the other services (RBI, 2011). Some commercial banks are also engaging in microfinance activities under their normal operations or as a separate unit. These types of banks are not reporting their microfinance activities separately in their audited financial statements or annual reports. Commercial banks and formal financial institutions that do not report microfinance activities separately are excluded from the dataset.

5.3.2 Sampling procedure and sample size

The precise number of MFIs in Sri Lanka and India cannot be readily determined due to the diverse legal forms in the microfinance sector. MFIs for this study are restricted to the formal and semi-formal financial institutions, conducting their microfinance activities under regulations. Informal service providers, such as

moneylenders, thrift and saving societies, are excluded. There is no clear and concise evidence to trace the microfinance activities of informal organisations as they neither register under any regulation nor are regulated by any government body. Furthermore, they are not required to submit financial and other information to any regulated body. As this study employs board characteristics as the independent variables, director information is necessary and is generally limited to the formal and semi-formal institutions.

The sample size of this study is purposely selected and the sample period is constrained by the data availability and accessibility. The year 2007 is selected as the start for data collection due to the availability of MFI annual reports, audited financial statements and corresponding financial and governance information, which is diminished for earlier years. Some MFIs are omitted due to the unavailability of annual reports, unpublished financial statements, missing data and/or insufficient time span of operation. Data collection for the sample ends in 2012 as it was the most recent year of data availability at the time data collection was completed. The time period for this study is six years. Data are collected from various sources.

MFI databases such as MIX market, LMFPFA, the Sri Lankan microfinance network in Sri Lanka and Sa-Dhan, the Indian microfinance network are employed to obtain financial data for the sample of MFIs from both countries. The MIX market database is the best publicly available financial data for individual MFIs around the world (Hartarska & Nadolnyak, 2007). Recent studies (Cull, Demirgüç-Kunt, & Morduch, 2011; Gonzales, 2007; Hartarska & Nadolnyak, 2007; Lin & Ahlin, 2011; Quayes, 2012; Shahzad, Tripe, Matthews, & O-Balli, 2012) have drawn on using the MIX market database for their empirical studies. MIX collects its data mainly through contracted consultants and country-level networks (Lafourcade et al., 2006). The database contains financial and social information of MFIs from around the world with 81% of the sample audited externally and 28% rated independently (Gonzalez & Rosenberg, 2006). These data were self-reported by MIX and reclassified based on the international accounting standards (Lafourcade et al., 2006). Sa-Dhan has 246 members, comprising 97 primary and 149 associate members. LMFPFA has 84 members, comprising 61 ordinary members and 23 associate members. In both countries, large MFIs account for a significant

percentage of total loan portfolio in the microfinance sector in which they operate and they may register either with MIX market and/or with country-level microfinance networks (Sa-Dhan and LMFPA respectively).

Data on firm-level corporate governance indicators are individually collected from the annual reports, individual firm websites and by personally contacting the individual firms.

These different data sources have been amalgamated into two separate, country-specific databases that include 54 MFIs for Sri Lanka and 113 MFIs for India, after eliminating the double-counting. This dataset covers the majority of MFIs of significant size that generally provide small uncollateralised loans to underserved people. There are many other financial institutions, such as government development banks, state-owned banks, commercial banks, postal and other savings banks, co-operative and rural banks, all of which provide some significant proportion of loans to low income people amongst their clientele.

The research design is longitudinal (panel). The panel is an unbalanced panel³⁵ due to the number of time periods (t) for all the individual firms (i) not being same. The panel dataset comprises 300 MFI-year observations for Sri Lanka and 575 MFI-year observations for India over the period 2007 to 2012. Table 5.3-1 summarises information of the sample sizes employed in the analysis for the two countries. The number of MFIs included for the sample of Sri Lanka and India varies due to the non-availability of secondary data when there are no audited financial reports available in the MIX database for some MFIs. A STATA statistical package is used to analyse data for interpretation.

Table 5.3-1: Sampling size of MFIs in Sri Lanka and India

Country	Year						Total firm-year observations
	2007	2008	2009	2010	2011	2012	
Sri Lanka	50	51	52	49	49	49	300
India	62	82	103	108	110	110	575

³⁵ Unbalance Panel has some missing data for at least one time period for at least one entity (See Stock & Watson, 2007).

5.3.3 Sample survivorship bias

Sample survivorship bias can misguide readers as it encourages spurious reversals (Carpenter & Lynch, 1999). This kind of bias cannot explain the patterns of performance as it uses only survivors during the period, not the non-survivors (Stock & Watson, 2007). It is important to solve the problem of estimation bias when measuring performance when only surviving MFIs are included and this is done by including all the firms without considering their disappearance over the sample period. Therefore the sample taken for this study is free from sample survivorship bias as all the MFIs in the database (survivors and non-survivors) were selected without considering the continuation of their activities for the entire sample period.

5.3.4 Data cleaning and editing

The data are supplemented and verified through annual reports and published audited financial statements in the MIX market website, individual websites and the different communication channels of MFIs. This helps to ensure the validity and the reliability of the secondary data in the MIX market, LMFPFA and Sa-Dhan, mitigating the effect of missing values in their datasets. In addition, reports and documents were obtained by contacting individual MFIs in Sri Lanka and India. Further, as there is no significant difference in the data collection and reporting approaches of each of the database networks, this provides a further means of cross checking data. Country-level networks in Sri Lanka and India follow the same guidelines available in the MIX market. There are signed technical agreements with the MIX market (LMFPFA, 2012; Sa-Dhan, 2012). Data entering errors in the dataset are checked and corrected if there are any data input errors noted.

One of the main issues arising in secondary data analysis is missing data (Little & Rubin, 1989) and it needs to be considered during the data analysis stage, otherwise findings may be misinterpreted (Bryman, 2012). In this study care has been taken to ensure all the missing data in the dataset are coded correctly. With the dataset available, careful handling of missing values in regression estimations is essential, which means not dropping or ignoring observations with missing data (Field, 2009; Little & Rubin, 1989). In the STATA statistical package, dots (“.”) are used to

represent the missing values by indicating there are no recorded values to represent for a certain variable, and in these instances, there is no zero (“0”) for each particular missing case.

STATA uses only the completed data for any variable by excluding missing data variables in the model, which is similar to the default setting in most statistical packages. A common approach in econometrics to deal with missing values is to drop the observations with missing data, restricting the analysis to subjects with no missing values in the variables. However, this so-called complete-case or listwise deletion technique can yield biased estimations by creating missing data bias (Raghunathan, 2004) and sample selection bias in regression. Therefore, to overcome the problem of missing data bias, this study considers mean, median and last value carry forward methods to replace missing variables in the sample dataset. It is appropriate to compare characteristics of individual firms with missing data and those with complete data when replacing missing values and this is the most common method used for missing value replacement. Even though the replacement values are not perfect replacements for missing values, they are likely to provide a better reflection of the sample than disregarding them would.

5.3.5 Data outliers and winsorizing

The presence of outliers in a dataset can exert a disproportionate effect on statistical analyses (Salkind, 2010) and provide misleading results (Stock & Watson, 2007). When the data are substantially different, it should be noted and treated appropriately. A Grubbs’ test can be used to identify the outliers in a univariate dataset which is based on the assumption of normally distributed population. Outliers are removed from the dataset by detecting one outlier at a time, signifying 1 for outlier case and 0 otherwise, and repeated until no outliers are detected. The Grubbs’ test indicates that there are no outliers included in the current dataset.

However, the Grubbs’ test is based on the assumption that data are normally distributed. To overcome the limitations in the Grubbs’ test, this study utilises

winsorization³⁶ to handle the spurious outliers in the dataset. Salkind (2010, p. 1637) states the advantage of winsorizing the data is to “protect against some of the harmful effects of outliers” and it falls within a field known as robustness statistics. This method can be used for small sample size. Therefore, all the financial and outreach variables are winsorized at 1% and 99% to control for the noise effects arising from outliers in the dataset.

5.3.6 Normality test

Normality data is a criterion for parametric statistical tests. Non-normally distributed variables such as these that are highly skewed have large kurtosis, or have substantial outliers which can misrepresent the relationships and significance of the tests. It is important to check whether the data in the sample are normally distributed (bell-shaped curve) (Field, 2009). There are several visual checks that may be used, such as laying out the interval variables graphically, particularly in the ways of histograms, frequency polygons, box-and-whisker plots and normal probability plots. Among these graphic methods, the frequency polygon is an appropriate method to interpret pure shape of normal distribution which is a line drawing by connecting tips of the histogram bars (Bernard, 2013). It is easy to confirm whether the plot of the model is not too far from a straight line by using a normal probability plot.

Graphical representation of the data indicates that the data are substantially skewed. It is conventional to transform data into a symmetric distribution before starting the statistical analysis. Once the data are transformed, the normal distribution of these data is tested using the Jarque-Bera test for normality, which is based on the sample skewness and kurtosis. It indicates that all data are normally distributed. When the Jarque-Bera test statistic value is sufficiently greater than the chi-squared value, it suggests the rejection of the null hypothesis that errors are normally distributed.

Transformation of data into its natural logarithm is one method to have a strong link between the variables and have the effect of making the distribution more normal

³⁶ Winsorization is the transformation of statistics by limiting extreme values in the dataset to reduce the effect of possibly spurious outliers.

when it is highly dispersed or skewed (Bernard, 2013). However, in the real world, it is difficult to find perfect normal distributions because most distributions tend to be skewed. The slight changes, ones that are less skewed³⁷, in the data can be accepted and can be clearly identified by using the box-and-whisker plots. In this regard, it can be concluded that the data are not highly skewed from the central tendency. Therefore, these variables satisfy the assumption of normality in parametric test analysis (Field, 2009).

5.4 Methodology

This section specifies the research model used to test the association between corporate governance and performance of MFIs in Sri Lanka and India and the data analysis techniques used for this study. The analysis techniques are broadly divided into two phases: descriptive and inferential, where inferential analysis consists of univariate, bivariate and multivariate analysis techniques.

5.4.1 Model specification for MFI governance and performance

This study sample comprises cross-sectional and time-series data which allows use of panel data analysis techniques. Panel data analysis uses multiple entities of data where each entity is observed at two or more time periods (Stock & Watson, 2007). However, before setting up a panel, it is important to test the homogeneity of collected data. A poolability test indicates whether panel regression is appropriate by testing whether a pool or a single cross-sectional model is more robustness. The poolability test helps to select the panel model to be estimated within fixed effect framework;

1. Are there individual effects or is it better to omit individual effects to estimate by pooled ordinary least squares (OLS)?
2. Are there time effects over the individual effect?
3. Are the coefficients of β really constant across individuals?

³⁷ A rule of thumb is that a variable is reasonably close to normal if its skewness has values between -1.0 and +1.0.

The null hypothesis of the poolability test is:

$$H_0: \beta_{ik} = \beta_k$$

This is suggesting that slopes remain constant in both fixed-effect and random-effect models and only the intercept and error variance matter. The simplest poolability test is performed to determine whether the regression lines from different pools have a common slope and a common time-zero intercept. If the test rejects the hypothesis of equality of slopes (if there is a significant difference in slopes among pools), it is not appropriate to combine the data. The implicit assumption of pooled OLS is that all the values in the cross-section have the same intercept.

The Chow test is performed to check whether the data can be pooled (Baltagi, 2008), which determines whether independent variables in the dataset have similar or different impacts on various subgroups of the population. The Chow test does not suggest to rejecting the null hypothesis of poolability and confirm that the data can be pooled.

Panel Data Analysis

A linear multiple regression model is employed to provide empirical evidence of the impact of corporate governance on MFI performance. The commonly used multiple regression analysis is initially applied to the panel data analysis. The panel data has a large number of observations and allows control of unobserved variables such as differences in business practices across companies or cultural factors; variables change over time but not necessarily across entities. Further, the regression model can permit solving for omitted variables and enables the estimation of dynamic equations with lagged dependent variables on the right hand side.

Following Hartarska (2005), Kyereboah-Coleman and Osei (2008), Mersland and Strøm (2009) and others, this study has also employed the panel data estimation methodology. To carry out the analysis in this study, the basic panel data analysis regression equation can be written more generally as follows:

$$\begin{aligned}
 Performance_{it} = & \alpha + \beta_1 FemDir_{it} + \beta_2 FemCEO_{it} + \beta_3 FemChair_{it} + \\
 & \beta_4 Duality_{it} + \beta_5 IntDorDir_{it} + \beta_6 ClientDir_{it} + \\
 & \beta_7 IndDir_{it} + \beta_8 Bsize_{it} + \beta_9 IntAudit_{it} + \beta_{10} Regbank_{it} + \\
 & \beta_{11} Fage_{it} + \beta_{12} Fsize_{it} + \beta_{13} Lev_{it} + year\ dummies + \\
 & organisation\ type\ dummies + \varepsilon_{it}
 \end{aligned} \tag{1}$$

Where, i indexes firm observations which takes 1-n, t indexes time which takes the values of 2007 to 2012, α denotes the intercept of the straight line and β denotes the slope of the regression line.

The dependent variables for this study can be viewed as; financial performance or outreach. *OSS*, *ROA*, *YOGLP*, *OCR*, *CA* and *PAR* are used as proxies for the financial performance variable, whereas outreach variable proxies are *Breadth*, *FemBorr* and *Depth*. *FemDir*, *FemCEO*, *FemChair*, *Duality*, *IntDorDir*, *ClientDir*, *IndDir*, *Bsize* and *IntAudit* denote the corporate governance variables of the study (The variables are defined in Table 4.6-1). According to the hypotheses (See Chapter 4) positive coefficients are expected for β_1 , β_2 , β_3 , β_5 , β_6 , β_7 , β_8 and β_9 , while negative coefficients are predicted for β_4 . These coefficients indicate how much of the variance in the dependent variable is predictable from the scores of the independent variable. The remaining variables are used as control variables which are expected to associate with dependent variables. ε_{it} is denoted the inherent unexplained variation (error term).

Based to the hypothesis developed in Chapter 4, H1_a, H2_a, H3_a, H5_a, H6_a, H7_a, H8_a and H9_a imply that *OSS*, *ROA*, *YOGLP* and *CA* are expected to have a positive relationship with corporate governance while *OCR* and *PAR* are negatively related. H4_a implies that *OSS*, *ROA*, *YOGLP* and *CA* are expected to have a negative relationship with corporate governance while *OCR* and *PAR* are positively related.

For outreach variables, H1_b, H2_b, H3_b, H5_b, H6_b, H7_b, H8_b and H9_b imply that *Breadth* and *FemBorr* are expected to have a positive relationship with corporate governance while *Depth* is negatively related. H4_b implies that *Breadth* and *FemBorr* are expected to have a negative relationship with corporate governance while *Depth* is positively related.

5.4.2 Data analysis techniques

The hypotheses presented in Chapter 4 are tested using a sequence of data analysis techniques.

5.4.2.1 Descriptive analysis of data

Descriptive statistics describe and summarise data in a meaningful way, making them more useful for analysis. Mean, median, variance, standard deviation, histograms and pie charts are suggested by Bernard (2013) and Field (2009) to promote understanding of the data through summary.

Considerations necessary for this dataset start with what is the best measure of central tendency. First, the arithmetic mean is used to explain the average value of the variables. A mean can be heavily influenced by the outliers or big gaps in the sample. If the data distribution is skewed, then the median may be a better measure as it gives the mid-point of the distribution. To understand whether the data are homogeneous or heterogeneous the standard deviation, a well-known measure of dispersion for an interval data sample, is computed. In addition, minimum and maximum values of a variable are used in this study to identify the extreme values in a particular variable and the range over which data are scattered.

Careful consideration of the descriptive statistics provides important information to identify the overall behaviour of the data. This stage was completed diligently, especially to be sure parametric procedures were appropriate.

5.4.2.2 Inferential analysis of data

Inferential statistics assist in making generalisations about the population from which sample were drawn. Inferential data analysis techniques are used to make statements about the world beyond the data in hand (Bernard, 2013, p. 551). In this relation, bivariate and multivariate analysis is used to check the association between independent and dependent variables (Bernard, 2013; Bryman, 2012).

T-test analysis: Comparing two means

T-test checks whether the means of two groups are statistically significantly different from one another and there are two types of *t*-tests: one-sample *t*-test and two-sample *t*-test. This study considers a two sample *t*-test to compare the means of corporate governance characteristics and performance of MFIs between Sri Lanka and India as it examines the means by which two independent groups differ on any given variable (Bernard, 2013). *t*-Statistics will be positive if the first sample mean value is larger than the second sample, and negative if the first sample mean is smaller than the second. The null hypothesis of the mean value of the distribution of a measurement for Sri Lanka and India can be written as follows:

H₀: mean value of Sri Lankan variable = mean value of Indian variable

Wilcoxon test (z-test): Comparing two samples

The Wilcoxon test (*z*-test) is used to compare two related samples that have data from repeated measures. This is an alternative test for the two sample *t*-test and appropriate for non-parametric statistical testing where data are not normally distributed. This study employs two sample *z*-tests to investigate whether there are any statistically significant differences in median values between Sri Lanka and India for a given categorical variable. The null hypothesis asserts that the median value of the distribution of a measurement for Sri Lanka and India is identical and can be written as follows:

H₀: median value of Sri Lankan variable = median value of Indian variable

Analysis of covariance (ANCOVA)

Analysis of covariance (ANCOVA) is the appropriate technique to analyse data when there are both categorical/dichotomous and interval/continuous predictor variables in the model. Interval/continuous variables that predict the dependent variable can be included in the analysis as a covariate (Field, 2009). The research model for this study includes a mixture of interval/continuous and dichotomous/categorical independent variables. For interval/continuous variables multiple regression is a preferred approach whereas for dichotomous/categorical

independent variables ANCOVA is suggested as more stable. However, it is unclear in the literature which statistical analysis technique is most suitable if there is a mixture of interval/continuous and categorical/dichotomous independent variables in a model. Most prior studies (Bassem, 2009; Mersland & Strøm, 2009) have used multiple regression statistical technique to analyse the nexus between corporate governance and performance variables even though they have both interval and dichotomous independent variables in their model. Therefore, this study applies ANCOVA statistical technique as a robustness check to see whether there are any significant differences in the results when compared with the multiple regression technique. If the results obtained from the ANCOVA analysis are also similar and indicate that there is no significant difference with multiple regression analysis results, then the OLS technique can be used for further estimating the unknown parameters of the study.

Direction and shape of covariations

Direction and shape of the relationships are important when discussing the findings in connection with the numerical results. The direction of covariation deals with the positive or negative signs of the covariation, but the shape of covariation refers to the linear or non-linear relation of the covariation. Scatterplots can be created to identify the shapes and directions of the relationships (Bernard, 2013).

Statistical significance of the study

Statistical significance provides an indication of the level of confidence of findings. This can be generalised to the population by which sample is selected (Bryman, 2012). This study employs three levels of statistical significance. The most commonly used level of statistical significance (p -value or probability value) in hypotheses testing is 0.05 (**) significance level (Bernard, 2013; Field, 2009). Furthermore, p -values contain 0.10 (*) and 0.01 (***) are also considered in this study as moderately significant and very significant respectively.

Pair-wise correlation matrix

The pair-wise correlation is allowed to identify independent variables that are highly correlated with each other. A proximity matrix of variables is used to measure the relationships between variables and can be applied when at least one of the variables in a bivariate relation is interval or ratio (Bernard, 2013). This simplifies the process of controlling for prospective multicollinearity. It measures whether the changes in one variable correspond with equivalent changes in other variables (Bernard, 2013, p. 622), by giving a value between +1 and -1.

Multicollinearity

The problem of multicollinearity refers as the influence of one predictor variable may not be free from the influence of another variable with which it is correlated (Bernard, 2013, p. 666). This increases the standard errors of the coefficients by making some variables statistically insignificant when they should be significant. In the correlation matrix, if the correlation coefficients among the regressors do not exceed 0.8, then multicollinearity is not a serious problem for multivariate analysis (Gujarati & Porter, 2004). Kennedy (2008, p. 196) states correlation coefficients need to be in the area of 0.8–0.9 to detect collinearity among two variables.

The most frequently used method to measure the multicollinearity is the variance inflation factor (VIF) which measures the increment of variance of an estimated coefficient when the predictor variables are correlated. The given rule of thumb is that when the VIF is 10 or more, there are multicollinearity issues among the independent variables, which need to be addressed (Nguyen et al., 2014).

Multiple linear regression analysis

Multiple linear regression analysis, called multiple-R is used in this study to estimate the combined correlation of a set of independent variables on the dependent variables (Bernard, 2013). The most common way of analysing the effect of corporate governance mechanisms on MFI performance is to estimate the pooled OLS regression, which is the most widely used method of estimating the unknown parameters in a multiple linear regression model (Stock & Watson, 2007). There

are some classical assumptions to be met by OLS, being the best method for regression analysis.

The following common pooled OLS model is used to find out the impact of independent variable (X) on dependent variables (Y):

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 Z_{it} + \varepsilon_{it}$$

In this model, i indexes firm observations, t indexes time, where $i = 1, 2, \dots, N$ cross sectional units (firms) for periods $t = 1, 2, \dots, T$. X is vector for corporate governance variables, Z is vector for control variables while the inherent unexplained variation (error) is denoted by ε_{it} and the coefficients are denoted by the β .

In a panel dataset, two types of residual errors can occur. First, the unobserved firm effect, which is the residual of a given firm which may correlate across a year (Wooldridge, 2009) and second, the time effect, which is the residual of a given year which may correlate across different companies. Due to these unobserved heterogeneity effects, the explanatory variables may be endogenous and correlated with the residuals (ε) in the regression model. These heterogeneity effects offend the requirements for using an OLS model where all the independent variables should be exogenous (De-Min, 1973). To overcome this problem, the residual term (ε) of the basic panel data regression of equation is decomposed into firm-specific (individual specific) effect of u_i which captures all time invariant variables (including omitted variables) that affect Y (unobservable individual specific effect), and the remainder of the disturbance of v_{it} that varies cross-sectionally and over time (firm year heterogeneity).

$$\varepsilon_{it} = u_i + v_{it}$$

The two competing methods, fixed-effect and random-effect estimations are normally used to diagnose the unobserved firm characteristics in a panel model.

Fixed-effect model

Scholars (Himmelberg, Hubbard, & Palia, 1999; Yermack, 1996) use a fixed-effect procedure to overcome the estimation issues related to endogeneity (corporate

governance and ε are correlated) in order to produce consistent parameter estimates that are robustness to unobserved heterogeneity (individual firm characteristics) across firms. In a panel dataset, the fixed-effect model denotes a common, unbiased method to control for omitted variables' bias within the firm (Hausman & Taylor, 1981). This method is appropriate when the unobserved heterogeneity is constant over time for an individual firm (Schultz et al., 2010). Adams, Hermalin, and Weisbach (2010) recommend the fixed-effect estimation method to mitigate the time-invariant heterogeneity in a dataset.

When using a fixed-effect model, it assumes that all the x values are not homogeneous and hence have different intercepts. In a fixed-effect model the parameter estimation of the dummy variable is a part of the intercept and it allows unobserved individual effects to be correlated with other variables in the model (Greene, 2012). It means that differences across groups can be captured in differences in the constant term. This model assumes that the corporate governance and control variables in a firm are orthogonal to past, present and future innovations in performance (Schultz et al., 2010). This model can be formulated as follows.

$$Y_{it} = (\beta_0 + u_i) + \beta_1 X_{it} + \beta_2 Z_{it} + v_{it}$$

Where i denotes the individual MFI and t denotes the time. In these circumstances, i represents the cross-section dimension and t represents the time-series dimension. u_i is heterogeneity specific to firm i . β_0 denotes the scalar, β_1 is a $K \times 1$ vector coefficients, X_{it} is the i^{th} observation on the K dimensional vector of explanatory variable, Z_{it} is the i^{th} observation on the K dimensional vector of control variable and ε_{it} is the error term (residual term).

Random-effect model

Unlike the fixed-effect model, the random-effect model explores the differences in error term across the individual firms and time periods. In this model, the parameter estimation of the dummy variable is a part of the error term (Greene, 2012) and treats individual effects as uncorrelated with the other regressors (predictor variables) in the model. The variation across firms is assumed to be random and distributed independently of explanatory variables. A random-effect estimation

procedure should be used when the differences across firms have some effect on the outcome variables (Adams et al., 2010). The following is the formation of random-effect model.

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 Z_{it} + (u_{it} + v_{it})$$

Where i denotes the individual MFI (cross-sectional) and t denotes the time (time series). β_0 denotes the intercept, β_l is a $K \times 1$ vector coefficients, X_{it} is the i^{th} observation on the K dimensional vector of explanatory variable, Z_{it} is the i^{th} observation on the K dimensional vector of control variable and ε_{it} is the error term (residual term). u_{it} is heterogeneity specific to firm i and year t .

The random-effect model has the advantage of investigating the time-invariant effect on outcome variables whereas the fixed-effect model lets them be absorbed by the intercept (Adams et al., 2010). The random-effect model is suitable for individual firms that face different sorts of tradeoffs in governance mechanisms. It allows time-invariant variables to act as explanatory variables and allows for generalisation of the implications beyond the sample used in the model. Prior corporate governance and MFI performance relationship studies have used the random-effect estimation method to accommodate the impact of time-invariant variables (Bassem, 2009; Hartarska, 2005; Mersland & Strøm, 2009).

However, the random-effect model is not the explicit model for unobserved effects as it assumes that the explanatory (corporate governance) variables are uncorrelated with unobserved firm heterogeneity (MFI characteristics such as managerial quality or firm structure), that is u_i (Hartarska & Nadolnyak, 2007).

$$E(u_i/x_{i1}, \dots, x_{iT}) = E(u_i) \text{ or } Cov(x_{it} u_i) = 0$$

This is a very powerful assumption and it can be tested by using the Hausman test as it indicates that the random-effect model assumptions do not hold (Hartarska & Nadolnyak, 2007; Hausman & Taylor, 1981).

Hausman test

The Hausman test is a widely used econometrics test in the context of panel data to choose between fixed-effect and random-effect models as it tests for orthogonality of the common effects and the regressors (Greene, 2012; Hausman, 1978). It

examines whether the individual effects (unique errors) are correlated with other regressors in the model. The null hypothesis of the Hausman test assumes that individual effects are random and uncorrelated with the regressors. Therefore estimators for both models should be similar (Cameron & Trivedi, 2010, p. 266). If it fails to reject the null hypothesis (where p -value is insignificant and greater than 0.05 level), it suggests that the random-effect model is more appropriate for the study. If the null hypothesis rejects it, then the fixed-effect model can be used for this study.

Breusch-pagan lagrange multiplier (LM) test

Researcher of this study uses the Breusch and Pagan Lagrangian Multiplier (LM) test for random effect, such as robustness checking, to test whether the random-effect model is appropriate. This test facilitates the decision to use either a random-effect regression or OLS regression. The null hypothesis in the test is that variances across entities are zero. Rejection of the null hypothesis suggests that the random-effect model is appropriate; otherwise OLS is the preferred method.

5.4.3 Robustness estimations with panel

Dynamic panel generalised method of moment (GMM) estimation

Prior studies on the corporate governance and performance relationship have employed the traditional IV approach to mitigate the potential sources of endogeneity arising from unobserved heterogeneity and simultaneity with the identification of set of valid instruments (Z) for corporate governance. However, it is extremely difficult to identify the reliable instrument for endogenous variables as the identified instrument should be correlated with endogenous variables and uncorrelated with the error term of the model (Flannery & Hankins, 2013). Also, the instruments should have high correlation with the endogenous variables. Otherwise they are weak instruments, which undermine the precision of the estimator. Therefore, it is not an easy task to determine a set of instruments for this study.

Another weakness in this approach is that it is not designed to deal with the dynamic endogeneity, which is more likely to arise in the relationship between corporate governance structure and firm performance (Wintoki et al., 2012). Most of the previous studies in the microfinance sector do not explore the dynamic nature of this relationship (Bassem, 2009; Hartarska, 2005; Mersland & Strøm, 2009; Mori & Mersland, 2014). Taking in-to account the possibility of endogeneity arising from the dynamic nature of this relationship and the unavailability of appropriate instruments for MFI corporate governance research, this study adopts the dynamic panel generalised method of moments (GMM) technique to provide robustness results.

The GMM technique, which was developed by Hansen (1982) and further developed by Holtz-Eakin, Newey, and Rosen (1988), Arellano and Bond (1991), Arellano and Bover (1995) and Blundell and Bond (1998), produces unbiased, consistent and efficient estimators for dynamic panel data models by employing valid internal instruments for potential endogenous variables. GMM estimation provides a non-parametric approach to estimate parameters (Schultz et al., 2010) and helps to account for possible correlations among independent variables (Athanasoglou, Brissimis, & Delis, 2008; Baltagi, 2008) by overcoming the estimation problems inherent in unobservable heteroskedasticity, simultaneity and dynamic endogeneity.

As illustrated by Wintoki et al. (2012), corporate governance has a dynamic relationship with firm performance and it is a function of past performance and other firm characteristics. Therefore the dynamic model for corporate governance is as follows;

$$X_{it} = f(Y_{i,t-1}, Y_{i,t-2} \dots Y_{i,t-p}, Z_{i,t}, \mu_i, \varepsilon_{it})$$

Where, X represents the board governance of firm i^{th} in year t^{th} ; Y represents the firm performance; Z represents the other control variables, μ denotes the unobserved time-invariant firm effects, ε represents the random error term and p is the number of lags of firm performance.

Based on the above equation, the estimations of the effect of corporate governance on firm performance can be expressed as follows:

$$Y_{it} = f(Y_{i,t-1}, Y_{i,t-2} \dots Y_{i,t-p}, X_{i,t}, Z_{i,t}, \mu_i, \varepsilon_{it})$$

These estimators are designed for situations with a linear functional relationship, independent variables are not strictly exogenous, arbitrarily distributed fixed individual effects, heteroskedasticity and autocorrelation within individuals but not across them (Roodman, 2009a, p. 86). The key assumptions in this model are the use of lags as IVs (Wintoki et al., 2012). The benefit of using lag variables is that they control for potential simultaneity and reverse causality. This method is only designed for situations where there are “short T, large N” panels, which means a panel with few time period and many individual firms (Roodman, 2009a).

Among the two GMM approaches, the system GMM approach, proposed by Blundell and Bond (1998), is a more appropriate method to reduce the small-sample biasness when compared with the difference GMM approach. It is also superior to other estimators for dealing with the high persistence of corporate governance variables in the model (Nguyen, Locke, & Reddy, 2015a). Therefore, this study utilises the system GMM method for the combined sample of Sri Lanka and India to mitigate the dynamic endogeneity, simultaneity and time-invariant unobserved heterogeneity because combine sample has enough data for the results to be meaningful.

For the convenience of the reader, more information about this test is described in section 8.8 of Chapter 8.

There are limitations in dynamic GMM due to its complexity and easiness of generating invalid estimates (Roodman, 2009a). This method relies on firm’s history which means lags of dependent and independent variables for identification, and this creates a problem of weak instruments by having more lags of IVs (Wintoki et al., 2012). It is also assumed that the errors are serially uncorrelated which may not persist for all the variables.

5.4.4 Specification tests

5.4.4.1 Test for heteroskedasticity

In an OLS regression, the error term is assumed to be homoscedastic, which means variance of the error term is constant across observations and it cannot be violated.

Therefore, heteroskedasticity means a situation where the variance of the error term is not constant and varies across all the levels of independent variables (Stock & Watson, 2007). Most often, this arises with cross-sectional data and provides biased standard errors. Heteroskedasticity can be detected by using Breusch-Pagan/Cook-Weisberg Test for Heteroskedasticity or White's General Test for Heteroskedasticity. The null hypothesis that the error variances are all constant is tested by using the Heteroskedasticity test. However, the most common and trustworthy method to respond to the presence of heteroscedasticity is to estimate robustness standard errors as it relaxes the assumption that the errors are independent and identically distributed. This study uses the robustness standard error [VCE (robust)] option in STATA statistical package to obtain heteroskedasticity-robustness standard errors (also known as Huber/White or sandwich estimators).

5.4.4.2 Test for regressor endogeneity

It is important to test for the endogeneity of the regressors used in the model. A Durbin-Wu-Hausman (DWH) test for endogeneity provides a way to test whether a regressor is endogenous (Cameron & Trivedi, 2010). The test is under the null hypothesis that the specified endogenous regressors can actually be treated as exogenous regressors (Baum, Schaffer, & Stillman, 2007, p. 16). If there is a significant difference between the two coefficient vectors then the regressor is endogenous, otherwise it is exogenous. However, Hartarska (2005, p. 1632) states that the empirical evidence is not always supported the hypothesis that various governance mechanisms are endogenously determined.

5.4.4.3 Test for over-identifying restrictions

In a system GMM approach, the large collection of generated instruments can be suspected. The consistency of the estimators are highly dependent on the validity of instruments used. Therefore, it is important to diagnose the validity of over-identified instruments in an over-identified model to ensure that the parameters of the model are estimated using optimal GMM (Cameron & Trivedi, 2010, p. 185). Different tests can be used to check the validity of the IVs, such as the Hansen-J

test of over-identification restrictions and the Hausman specification test (Arellano & Bond, 1991). In this study, the validity of IVs used in the system GMM estimator is verified through the use of the Hansen-J test of over-identification as a standard test for joint validity of the IVs (Roodman, 2009a). The null hypothesis that the instruments are valid instruments cannot be rejected when the p -value is greater than 0.05 level. This confirms that all the instruments employed in the model are appropriate (Baum et al., 2007).

5.4.4.4 Stepwise regression

A stepwise regression is used to identify the most important corporate governance variables for the microfinance sector. This procedure is used only as a robustness option to check with the OLS regression outcomes to guarantee that this study has not missed any important variables in the model. As a result, both OLS and stepwise regression models have identified the same set of variables as significantly important variables to determine MFI financial performance and outreach. However, stepwise regression method does not apply to select best independent variables for the study, because this method is not recommended for testing the significance of a relationship between certain variables or a particular variable.

5.5 Conclusion

Prior research and anecdotal evidence largely suggests that there is a relationship between corporate governance and firm performance, but less is known about the microfinance sector. Based on the indicators provided in earlier empirical studies in developed and developing countries, this research explores the impact of corporate governance on MFIs' financial performance and outreach. Does it lead to better services to poor people?

This chapter presents the framework of the empirical analysis that is used to analyse the link between corporate governance and MFI performance. First, it describes the research method of this study. Second, the data collection method is described in relation to MFI definition. Third, the sample selection procedure, data cleaning, editing, transformation and normality test are all described. Lastly, the methodology

of the study with regards to model specification and data analysis techniques is discussed. Data analysis techniques consist of univariate, bivariate and multivariate analysis techniques and specification tests.

The next chapter presents the findings of significant corporate governance variables for financial performance and outreach of MFIs in Sri Lanka, applying the data analysis techniques described in this chapter.

CHAPTER SIX

CORPORATE GOVERNANCE AND PERFORMANCE IN MFIS IN SRI LANKA: AN EMPIRICAL INVESTIGATION

6.1 Introduction

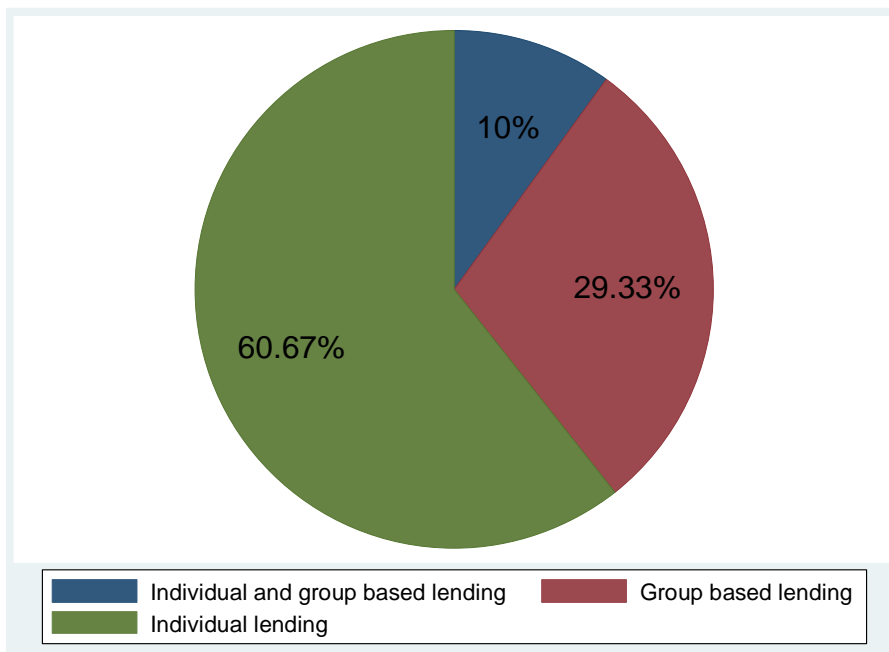
Empirical findings regarding the relationship between corporate governance practices and firm performance of Sri Lankan MFIs are presented in this chapter. First, this chapter provides a background of the Sri Lankan microfinance sector focusing on different organisation types and lending methods. Second, it provides an interpretation of the descriptive statistics relating to the Sri Lankan sample in order to visualise the behaviour of the dataset in a more meaningful way. Third, the study reports the relationships between nine key corporate governance variables and MFI performance, both financial and outreach. A panel data technique is employed as the main analytical framework to identify the corporate governance-performance relationship of MFIs in Sri Lanka. The chapter concludes pointing to those corporate governance practices that appear most significant for improving the performance of MFIs in Sri Lanka.

6.2 Background of Sri Lankan MFIs

A sample of 54 Sri Lankan MFIs is considered in this study for the period 2007 to 2012 and examines 300 MFI-year observations. MFIs in Sri Lanka utilise mainly three different lending methods (See Figure 6.2-1). Approximately 61% of institutions in this sample provide individual loans, 29% of the institutions provide group-based loans and 10% of the institutions provide both individual and group-based loans to their clients (See Figure 6.2-1). Usually, the individual lending method is used by banks and other financial institutions as the traditional lending relationship method between a bank and a customer. However, this traditional bank-customer relationship has not been adopted by MFIs, such as the Bangladeshi

Grameen Bank, which started in the 1970s, because the basis for microfinance lending is group-based lending not individual lending (Cull, Demirgüç-Kunt, & Morduch, 2009). Findings based on Sri Lanka data reveal that microfinance and group-based lending are now far from synonymous. This finding provides support to the view that MFIs in Sri Lanka have deviated from their core industry objective of providing group based lending and it is less popular in the Sri Lankan microfinance sector.

Figure 6.2-1: Lending Method of MFIs in Sri Lanka



A similar trend to that found in Sri Lanka has been experienced by microfinance borrowers around the world (Attanasio, Augsburg, Haas, Fitzsimons, & Harmgart, 2011; Cull et al., 2009). Group-based lending involves time-consuming weekly repayment meetings which are onerous for borrowers in the group and it is costly for MFIs to reach these customers. By comparison, individual lending is more profitable as it uses the traditional lending relationship between bank and customer. According to Mersland and Strøm (2009), nearly 54% of MFIs around the world are disbursed individual loans. Furthermore, the individual lending method has become the most prominent lending approach for approximately 57% of MFIs in a

2000-2007 sample of 280 MFIs from 60 countries (Galema et al., 2012). In addition, MFIs operating in Central and Eastern Europe and Newly Independent States provide more than 80% of their loans to individual applicants (Hartarska, 2005). Of 42 institutions in Euro-Mediterranean countries, 73% of MFIs are highly concentrated toward an individual lending method of providing loans to their borrowers (Bassem, 2009).

Figure 6.2-2: Organisation Types in Sri Lankan MFIs

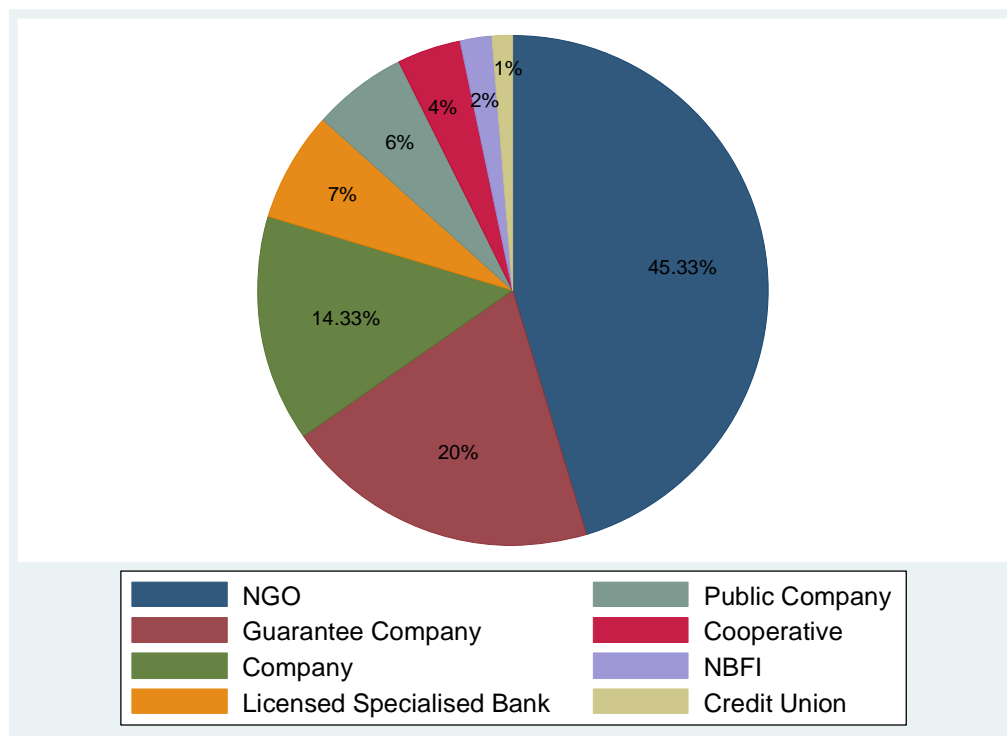


Figure 6.2-2 shows that the microfinance sector in Sri Lanka is represented by different types of institutions. Nearly 65% of the total sample comprises NGOs (45%) and guaranteed companies (20%), which are also registered as non-profit organisations (See Chapter 2). The representation of banks (7%), credit unions (1%), NBFIs (2%), and co-operative societies (4%) are low. The private and public listed companies represent respectively 14% and 6% of the total sample. This provides support for the view that most low income borrowers in Sri Lanka are served by not-for-profit organisations as those organisations are often thought to improve the lives of poor people. Furthermore, these institutions prefer being non-

profit organisations because this status helps them to operate under minimum regulations and reduced taxes enacted by the Sri Lankan government.

Similar to Sri Lanka, different types of organisations are represented in the microfinance sector of other countries. Hartarska (2005) states that 65.9% of MFIs in Central and Eastern Europe and Newly Independent States are NGOs whereas only 8.7% of MFIs are NBFIs. Of 42 MFI sample in Euro-Mediterranean countries, NGOs represent around 60% while NBFIs and banks represent 18% and 10%, respectively (Bassem, 2009). Strøm et al. (2014) and Mori and Mersland (2014) have highlighted MFIs in a worldwide sample (including Sri Lanka), and only 16% of them are co-operatives, 32% of them are banks and 51% of them are NGOs. Similarly, in Hartarska and Nadolnyak (2007) study (which has included only one Sri Lankan MFI), the NGO representation is around 50% whereas NBFIs is 34% (Hartarska, 2009).

6.3 Descriptive Data Analysis

Table 6.3-1 provides descriptive statistics of variables used in the study for the period 2007 to 2012. It depicts mean, median, standard deviation, minimum and maximum value for each variable.

The mean (median) of the *OSS* is 0.99 (0.99) and it is below one. This indicates that MFIs in Sri Lanka are not operating effectively and this figure is similar to the mean *OSS* (0.92) obtained for MFIs operating in Central and Eastern Europe and Newly Independent States (Hartarska, 2005). Moreover, a study undertaken by Bassem (2009) shows that 42 MFIs in Euro-Mediterranean countries have, on an average, *OSS* of 0.85 with a minimum and a maximum value of 0.20 and 1.43, respectively. However, in Sri Lanka, the minimum and maximum values range from 0.01 to 2.27.

Table 6.3-1: Descriptive statistics for Sri Lankan MFIs where n=300

Variables	Acronyms	Mean	Median	Std. Dev.	Min	Max
<i>Financial Performance Variables</i>						
Operational self-sufficiency	<i>OSS</i>	0.99	0.99	0.34	0.01	2.27
Return on assets	<i>ROA</i>	0.01	0.01	0.055	-0.24	0.27
Yield on gross loan portfolio	<i>YOGLP</i>	0.25	0.22	0.15	0.02	0.95
Operating expenses ratio	<i>OCR</i>	0.16	0.13	0.11	0.02	0.75
Capital asset ratio	<i>CA</i>	0.31	0.23	0.25	-0.1	1
Portfolio at risk more than 30 days	<i>PAR</i>	0.098	0.07	0.091	0	0.39
<i>Outreach Variables</i>						
Number of active borrowers		29144	2205	92911	25	881353
Breadth of outreach [LN(Active borrower)]	<i>Breadth</i>	8.16	7.70	2.03	3.22	13.7
Female borrowers to active borrowers (%)	<i>FemBorr</i>	0.81	0.88	0.19	0.30	1
Depth of outreach (Average loan balance per borrower/GNI per capita)	<i>Depth</i>	0.14	0.10	0.13	0	0.89
<i>Explanatory Variables</i>						
Female directors on board (%)	<i>FemDir</i>	0.43	0.33	0.33	0	1
Female CEO	<i>FemCEO</i>	0.34	0	0.47	0	1
Female chairperson	<i>FemChair</i>	0.4	0	0.49	0	1
Duality	<i>Duality</i>	0.26	0	0.44	0	1
International directors/donor representatives on board (%)	<i>IntDorDir</i>	0.07	0	0.21	0	1
Client/borrower representatives on Board (%)	<i>ClientDir</i>	0.07	0	0.16	0	0.8
Non-executive directors on board (%)	<i>IndDir</i>	0.67	0.71	0.22	0	1
Board size (No. of board members)	<i>Bsize</i>	8.47	8	4.44	1	30
Internal audit function	<i>IntAudit</i>	0.31	0	0.46	0	1
<i>Control Variables</i>						
Regulated by banking authority	<i>Regbank</i>	0.13	0	0.34	0	1
Firm age (No. of Years)	<i>Fage</i>	12.8	12	8.05	1	41
Firm size [LN(Total assets)]	<i>Fsize</i>	18.1	17.7	2.41	12.7	25
Leverage	<i>Lev</i>	0.69	0.77	0.25	0	1.1

Note: This table reports the descriptive statistics based on the Sri Lankan MFI sample. The variables are defined in Table 4.6-1. For interpretation purposes, number of active borrowers, international directors/donor representatives on board, client representatives on board and board size are calculated on the basis of levels instead of dummy and logarithm form. Only firm size is calculated based on logarithmic form.

Similar to the findings reported by Mersland and Strøm (2009) and Galema et al. (2012), the average *ROA* of MFIs in Sri Lanka is 1.3%. Also this 1.3% of *ROA* value is also obtained by half of the MFIs in Sri Lanka during 2007 to 2012. A sample of 202 MFIs from around the world reveals a *ROA* of 1.2% (Tchakoute-Tchuigoua, 2010). Figures in Table 6.3-1 show that *ROA* for MFIs in Sri Lanka varies between -24% and +27%. This negative value occurs as a few MFIs in the sample are non-profit making. Hartarska (2009) also reveals a negative *ROA* of -0.2% for a cross-country study.

The average portfolio yield (*YOGLP*) of Sri Lankan MFIs is 25% which is lower than an average portfolio yield for 379 MFIs from 73 countries reported by Mori and Mersland (2014) as 33%. A database of 278 MFIs from 60 countries gathered between 2000 and 2007 had a portfolio yield of nearly 40% which is not a surprising value for this sector (Mersland & Strøm, 2009). However, in this study, 50% of the MFIs are able to achieve 22% yield from their loan portfolio with a range of 2% - 95%.

The average operating cost ratio (*OCR*) for asset value is 16% and the median is 13%; somewhat smaller than those exhibited in other countries. The minimum and the maximum values for the MFIs vary between 2% and 75%. Prior research based operating expenses ratios on the average gross loan portfolio, which is not an appropriate indicator to measure operating cost because it suggests MFIs that provide smaller loans are inferior to those giving large loans, even though both groups of MFIs incur similar amounts of operating cost (Rosenberg, 2009, p. 11). Therefore, this study uses total assets as an alternative denominator, which is the approach recommended in the Microfinance Consensus Guidelines (2003).

Capital to asset ratio (*CA*) of Sri Lankan MFIs averages 31%, which is much higher than African MFIs at 26% (Lafourcade et al., 2006). When compared to banks with an average tier 1 capital to total risk-weighted asset ratio of 11.34% (Vincent, Gabriele, & Markus, 2012), these look good and are well over the prescribed threshold of 10% to 20%. The median value of capital to asset ratio for Sri Lankan MFIs is 23% and varies between a negative value (-10%) to a positive (100%) value, which indicates those MFIs are fully financed by their shareholders (equity).

Sri Lankan MFIs have a healthy credit portfolio as their portfolio at risk for more than 30 days (*PAR*) is closer to the prescribed threshold of 10% (mean = 9.8%, median = 7%). In addition, the minimum and maximum values of portfolio risk range from zero to 39% which is indicative of a difficult situation. African MFIs maintain comparatively high portfolio quality, with an average portfolio at risk for more than 30 days of 4%, performing better than their counterparts in South Asia (5.1%), East Asia (5.9%) and the Latin American and Caribbean regions (5.6%) respectively (Lafourcade et al., 2006).

In this study, the average number of active borrowers is approximately 29,000, where the median is 2,205, the minimum is 25 and the maximum is 881,353. Similarly, the average number of credit clients in a sample of 278 MFIs is recorded as 12,805 but the standard deviation is 26,861, the minimum is 74 and maximum is 394,374 which proves there is a huge dispersion in the number of clients in MFIs (Mersland & Strøm, 2009). Tchakoute-Tchuigoua (2010) study results show that the average number of active borrowers for a world dataset is 28,897 which is similar to the Sri Lankan situation. Due to the huge dispersion in the number of active clients (*Breadth*) in the sample, this study used natural logarithm transformation to condense the dispersion. Moreover, the results of log values show that the mean (8.16) and the median (7.70) values are much closer when compared with the transformation numbers.

In Sri Lanka, the average number of female borrowers (*FemBorr*) represents 81% of the total number of credit clients. The median value of 88% indicates that 50% of MFIs have less than 12% male borrowers. A study conducted by Mersland and Strøm (2009) highlighted that 73% of MFI customers around the world were female, which is a comparatively high proposition. There are some MFIs that only serve female clients while some are not consciously targeting female clients because female borrowers represent only 30% of total borrowers.

An average *Depth* of outreach in Sri Lankan MFIs is 0.14 where the median is 0.10. This is a relatively weak value when compared with other studies. These lower values indicate that the poor borrowers are very well served in Sri Lanka because a higher value indicates less low-income clients are being served (Bassem, 2009; Hartarska, 2005). For 202 MFIs in the period 2001 to 2006, the *Depth* of outreach

is computed as 0.862 (Tchakoute-Tchuigoua, 2010). The minimum value for the *Depth* of outreach in Sri Lankan MFIs is zero while the maximum is 0.89.

The percentage of average women directors (*FemDir*) on the MFI boards is approximately 43%, which is higher than the value obtained by Hewa-Wellalage et al. (2012) for listed companies in Sri Lanka (7.4%). However, in the microfinance sector Bassem (2009) and Kyereboah-Coleman (2006) highlight that on average 40% of boards are made up of women in Euro-Mediterranean countries. In this study, half of the MFIs in the total sample have 33% female on their boards, whereas the minimum is zero and the maximum is 100%.

MFIs with female CEOs (*FemCEO*) are 34% in Sri Lanka which indicates that 66% of Sri Lankan MFIs have male CEOs. Similarly, Mersland and Strøm (2009) and Galema et al. (2012) find in their study of around 280 MFIs in 60 countries that 23% - 25% of CEOs are females.

Findings of this study show that in Sri Lanka 40% of MFIs have a female chairperson (*FemChair*) which is almost double the 22% in a global panel of 379 microbanks in 73 countries (Strøm et al., 2014). However, their sample contained only one Sri Lankan MFI.

Based on the sample, 26% of the MFIs in Sri Lanka have a CEO who is doubling as chairperson (*Duality*) of the board and this value is relatively high when compared with the global sample (12%-15%) but low compared with Ghana (50%). Hence in this sample, 74% of MFIs in Sri Lanka have separated the roles of CEO and chair. A study conducted by Hewa-Wellalage and Locke (2011) revealed that only 15% of multinational company subsidiaries have CEO duality whereas this percentage is almost double when considering local public companies in Sri Lanka, which is consistent with the findings of this study.

This study considers both international and/or donor directors (*IntDorDir*) as an interaction variable to identify their combined effect on firm performance. Sri Lankan MFI boards have around 7.4% of directors who represent international and/or donor directors (*IntDorDir*), which is very insignificant representation when compared with literature (Galema et al., 2012; Mersland & Strøm, 2009). Mersland and Strøm (2009) state that the average representation of international board

directors for MFIs around the world is 57.6% which is a considerably higher amount than Sri Lanka, and confirmed by Galema et al. (2012) with a sample of 280 MFIs from 60 countries at 56%. Besides, the findings of this study detail that half of the Sri Lankan sample has no international director and/or donor director representation on their boards.

Similar to the findings reported by Hartarska (2005) and Mersland and Strøm (2009), Sri Lankan MFIs have a smaller number of directors (7%) on their boards who represent the clients of the firm (*ClientDir*). The customer representation on the board is 11% for MFIs around the world (Mersland & Strøm, 2009) but Central and Eastern Europe and Newly Independent States' MFIs have only 4% (Hartarska, 2005) which is smaller than Sri Lanka. Further, findings of this study indicate that 50% of the sample has no customer representation on their boards.

Around 67% of the board members in Sri Lankan MFIs are non-executive directors (*IndDir*). This average value is consistent with the findings of Hewa-Wellalage and Locke (2011) for Sri Lankan listed companies (61%), because with regard to the new listing rule, one third of board members should be non-executive directors. A study conducted for Central and Eastern Europe and Newly Independent States shows on an average 58% of board members do not have an affiliation with any of the stakeholders in the firm (Hartarska, 2005) which is much closer to the Sri Lankan figure. Further, the minimum percentage of non-executive directors in the Sri Lankan microfinance sector board is zero and the maximum is 100%.

The number of board members (*Bsize*) in Sri Lankan MFIs is around 8.5 (median of 8 members) and this research finding is aligned with those of Mersland and Strøm (2009) who note that most world-wide MFIs have between seven and nine directors. European and US codes recommend the ideal board size should range between five and 15 members. Further, in Sri Lanka, the average board size of listed non-financial companies is 7.6 (Hewa-Wellalage & Locke, 2011). Table 6.3-1 shows that the minimum value for board size is 1 and the maximum is 30 members.

On average, 31% of MFIs have an internal auditor reporting to the board (*IntAudit*). Compared with Mersland and Strøm (2009), Bassem (2009) and Hartarska (2005) research findings, the internal audit practices for MFIs in Sri Lanka are low; half of

the MFIs around the world have an internal auditor reporting directly to the board. A more recent study reports only 41% of MFIs around the world have an internal auditor (Strøm et al., 2014).

According to the findings shown on Table 6.3-1, around 13% of MFIs in the sample are regulated under central bank authority (*Regbank*). Of the 278 MFIs in 60 countries, Mersland and Strøm (2009) suggest that 32% of MFIs are regulated under banking authority. The proportions of regulated MFIs differ between countries due to the structure of regulation and differences in regulatory philosophy.

The minimum value of firm age (*Fage*) for MFIs in Sri Lanka is one year and the maximum is 41 years. The mean and the median values of age are between 12 and 13 years. The findings of this study are fairly close to those of Kyereboah-Coleman and Osei (2008) with 13 years of firm operation for Ghana MFIs. According to Mersland and Strøm (2009), typical MFIs around the world are young with an age of nine years and that finding is supported by a subsequent global dataset of 379 MFIs from 73 countries which indicates an age of 10.5 years (Mori & Mersland, 2014). A similar result of eight years is noted by Hartarska and Nadolnyak (2007) and Hartarska (2009) from cross-country samples.

Firm size (*Fsize*) is calculated based on the asset value of an MFI. Log transformation of asset values are used in the Table 6.3-1 due to the voluminous numbers and huge standard deviation. The mean value of the firm size is 18.1 and the median value is 17.7. This highlights that 50% of MFIs in the sample are smaller than 17.7. Moreover, results show that the size of MFIs in Sri Lankan ranges from 12.7 to 25.

Leverage (*Lev*) indicates the debt to asset ratio of Sri Lankan MFIs. The average debt to asset ratio is 69% while the median is 77%. These findings highlight that Sri Lankan MFIs are highly leveraged. Debt ratio for 108 MFIs in a world dataset is 2.52 based on equity not the total assets. The minimum value of debt to asset ratio is zero, suggesting there are MFIs that exist exclusively on equity.

6.4 Pair-wise Correlation

The pair-wise correlation matrix for the dependent and independent variables is provided in Table 6.4-1. The significant correlations between financial performance, outreach, corporate governance and control variables are shown in this table. Several statistically significant correlations are observable between corporate governance variables and the financial performance and outreach variables of MFIs. This suggests further analysis is warranted.

Table 6.4-1: Correlation matrix for variables

	OSS	ROA	YOGLP	OCR	CA	PAR	Breadth
OSS	1						
ROA	0.036	1					
YOGLP	-0.052	0.068	1				
OCR	-0.361***	0.135**	0.470***	1			
CA	0.138**	0.061	-0.096*	-0.014	1		
PAR	-0.065	-0.054	-0.036	0.058	-0.187***	1	
Breadth	0.218***	-0.100*	-0.129**	-0.391***	-0.104*	-0.126**	1
FemBorr	0.029	-0.048	0.022	0.077	0.061	0.031	-0.072
Depth	-0.061	-0.013	-0.104*	-0.234***	-0.133**	-0.063	0.289***
FemDir	-0.063	0.100*	0.021	0.083	-0.195***	0.248***	-0.337***
FemCEO	0.050	0.141**	-0.073	0.079	-0.128**	0.055	-0.187***
FemChair	0.144**	0.241***	-0.130**	-0.081	-0.072	0.065	-0.013
Duality	-0.095	0.133**	0.071	0.274***	0.069	-0.077	-0.133**
IntDorDir	0.114**	-0.129**	-0.058	-0.073	0.100*	-0.007	0.163***
ClientDir	-0.030	0.292***	-0.051	-0.014	0.069	-0.135**	-0.217***
IndDir	-0.033	-0.005	0.016	0.040	-0.143**	-0.199***	0.021
Bsize	0.063	0.041	-0.128**	-0.317***	-0.128**	-0.013	0.137**
IntAudit	0.239***	-0.080	-0.126**	-0.275***	-0.024	-0.181***	0.551***
Regbank	0.157***	0.016	0.007	-0.403***	-0.266***	-0.135**	0.586***
Fage	0.176***	0.067	-0.024	-0.188***	0.073	0.129**	-0.044
Fsize	0.156***	-0.085	-0.102*	-0.404***	-0.127**	-0.136**	0.939***
Lev	-0.138**	-0.061	0.096*	0.014	-1	0.187***	0.104*

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	FemBorr	Depth	FemDir	FemCEO	FemChair	Duality	IntDorDir
FemBorr	1						
Depth	-0.276***	1					
FemDir	0.303***	-0.044	1				
FemCEO	0.124**	0.076	0.459***	1			
FemChair	0.220***	0.023	0.539***	0.464***	1		
Duality	-0.109*	0.002	0.075	0.263***	0.172***	1	
IntDorDir	0.053	0.121**	-0.090	0.048	0.078	-0.085	1
ClientDir	0.074	0.022	0.287***	0.400***	0.342***	0.237***	0.117**
IndDir	-0.095*	-0.002	-0.271***	-0.061	-0.049	-0.065	0.155***
Bsize	0.293***	0.078	0.334***	0.124**	0.245***	-0.172***	0.129**
IntAudit	-0.068	0.299***	-0.284***	-0.116**	-0.013	0.004	0.040
Regbank	-0.293***	0.547***	-0.066	0.060	0.147**	-0.029	0.068
Fage	0.308***	-0.126**	0.258***	-0.056	0.212***	-0.006	-0.124**
Fsize	-0.107*	0.529***	-0.305***	-0.169***	-0.041	-0.127**	0.143**
Lev	-0.061	0.133**	0.195***	0.128**	0.072	-0.069	-0.100*

	ClientDir	IndDir	Bsize	IntAudit	Regbank	Fage	Fsize	Lev
ClientDir	1							
IndDir	-0.107*	1						
Bsize	0.219***	0.072	1					
IntAudit	-0.106*	0.037	0.060	1				
Regbank	0.065	-0.045	0.209***	0.487***	1			
Fage	-0.066	-0.129**	0.330***	-0.027	0.036	1		
Fsize	-0.202***	0.008	0.168***	0.584***	0.650***	-0.021	1	
Lev	-0.069	0.143**	0.128**	0.024	0.266***	-0.073	0.127**	1

Note: This table reports the pair-wise correlation coefficients among the variables. *, **, and *** denote statistical significance at 10%, 5%, and 1% levels, respectively. The notations are defined in Table 4.6-1.

The pair-wise correlation matrix also provides a check as to whether multicollinearity is likely to be resilient to invalidating the simultaneous inclusion of certain independent variables in a linear regression model. The correlations among independent variables have been considered in this study to detect multicollinearity among variables. Multicollinearity is deemed to be a serious concern when the correlation coefficients are above 0.7. The highest value shown

in the Table 6.4-1 is 0.66, nevertheless, further testing using VIF is applied. Commonly, the given rule of thumb is that when the VIF is 10 or more, there is multicollinearity among the independent variables and it is a considerable situation. All VIF values in Table 6.4-2 are less than 2.6.

Table 6.4-2: Multicollinearity diagnostic tests

Variable	VIF
FemDir	2.47
FemCEO	1.63
FemChair	1.79
Duality	1.21
IntDorDir	1.16
ClientDir	1.55
IndDir	1.30
Bsize	1.63
IntAudit	1.65
Regbank	2.17
Fage	1.37
Fsize	2.59
Lev	1.32

Note: This table reports the VIF coefficients for explanatory variables. The notations are defined in Table 4.6-1.

6.5 Selection of Analysis Technique

Corporate governance variables listed in Table 6.3-1 are a mixture of interval/continuous and dichotomous/categorical variables. It is unclear in the literature which statistical analysis technique should apply if there are mixed interval/continuous and dichotomous/categorical independent variables in a model. The conventional statistical analysis technique for interval/continuous variables in an equation is multiple regression, and for dichotomous/categorical independent variables is analysis of covariance (ANCOVA). The literature remains inconclusive as to the appropriate model when there are both types of variables, although there

is a leaning toward the multiple regression formulation. This study uses both ANCOVA and multiple regression analysis techniques to determine whether there is any difference in results. According to the Table 6.5-1, results indicate that there is no significant difference between applying either of these two methods. The decision was made to use multiple regression technique for further analysis based on corporate governance and firm performance.

Table 6.5-1: ANCOVA and multiple regression tests

Dependent Variables	ANCOVA		Multiple Regression			
	<i>F</i> statistics	<i>P</i> value	Adj. R-squared	<i>F</i> statistics	<i>P</i> value	Adj. R-squared
OSS	3.98	0.000	0.1931	3.98	0.000	0.1931
ROA	2.90	0.000	0.1325	2.90	0.000	0.1325
YOGLP	5.64	0.000	0.2713	5.64	0.000	0.2713
OCR	9.09	0.000	0.3936	9.09	0.000	0.3936
CA	5.82	0.000	0.2705	5.82	0.000	0.2705
PAR	4.18	0.000	0.2033	4.18	0.000	0.2033
Breadth	28.68	0.000	0.6896	28.68	0.000	0.6896
FemBorr	8.87	0.000	0.3871	8.87	0.000	0.3871
Depth	10.62	0.000	0.4353	10.62	0.000	0.4353

Note: This table presents the test results for ANCOVA and multiple regression. The notations are defined in Table 4.6-1.

6.6 Multiple Regression Analysis for Financial Performance

6.6.1 Selection of regression model

Table 6.6-1 depicts the multiple regression results for fixed-effect and random-effect approaches. The Hausman test result suggests that it is important to employ a fixed-effect model for *YOGLP* and *CA* variables due to the rejection of the null hypotheses where *p*-values are significantly lower than the 0.05 level. A random-effect model is appropriate for *OSS*, *ROA*, *OCR* and *PAR* variables.

Table 6.6-1: Selection of fixed or random effect model

Dependent Variables	Prob>chi2	Hausman Test Result
OSS	0.2060	Random-effect Model
ROA	0.3588	Random-effect Model
YOGLP	0.0014	Fixed-effect Model
OCR	0.3026	Random-effect Model
CA	0.0000	Fixed-effect Model
PAR	0.0553	Random-effect Model

Note: This table presents the Hausman test results for financial performance variables. The notations are defined in Table 4.6-1.

A Breusch and Pagan LM test for random effects is applied as a robustness check (Hartarska, 2005). The test result ($Prob > \chi^2 = 0.00$) suggests that the pooled regression model is not appropriate for *OSS*, *ROA*, *OCR* and *PAR* dependent variables due to the rejection of null hypotheses at 5% significance level. The alternative hypotheses were accepted, indicating it is appropriate to use a random-effect model.

The study could use dynamic panel GMM estimation method as a robustness test. However, according to Roodman (2009a), the Sri Lankan MFI sample in this study does not have enough firm-year observations to conduct it.

Table 6.6-2: The relationship between corporate governance and financial performance of MFIs in Sri Lanka

Variables	OSS		ROA		YOGLP		OCR		CA		PAR	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]
FemDir	-0.208** (0.030)	[-2.172]	-0.008 (0.593)	[-0.534]	-0.155 (0.109)	[-1.631]	-0.015 (0.923)	[-0.097]	0.017 (0.668)	[0.431]	0.017 (0.467)	[0.728]
FemCEO	0.115** (0.025)	[2.237]	0.003 (0.690)	[0.399]	-0.090 (0.244)	[-1.177]	-0.021 (0.771)	[-0.290]	0.011 (0.815)	[0.236]	0.001 (0.960)	[0.050]
FemChair	-0.010 (0.830)	[-0.215]	0.014* (0.065)	[1.847]	-0.005 (0.918)	[-0.103]	0.000 (0.997)	[0.004]	-0.016 (0.597)	[-0.532]	0.007 (0.573)	[0.563]
Duality	-0.060 (0.212)	[-1.248]	-0.000 (0.995)	[-0.006]	0.085* (0.092)	[1.718]	0.132** (0.049)	[1.966]	0.026 (0.290)	[1.069]	-0.007 (0.582)	[-0.550]
IntDorDir	0.034 (0.507)	[0.663]	-0.017** (0.042)	[-2.029]	0.056 (0.324)	[0.995]	0.066 (0.337)	[0.960]	-0.015 (0.410)	[-0.830]	0.012 (0.361)	[0.914]
ClientDir	0.048 (0.374)	[0.888]	0.025*** (0.004)	[2.895]	0.031 (0.570)	[0.572]	-0.091 (0.206)	[-1.264]	0.009 (0.607)	[0.518]	-0.007 (0.623)	[-0.492]
IndDir	-0.236* (0.056)	[-1.910]	-0.021 (0.269)	[-1.106]	-0.297* (0.052)	[-1.991]	0.064 (0.733)	[0.341]	0.105** (0.029)	[2.238]	-0.039 (0.204)	[-1.269]
Bsize	0.085 (0.103)	[1.629]	0.002 (0.832)	[0.212]	-0.018 (0.823)	[-0.224]	-0.137* (0.078)	[-1.762]	-0.004 (0.893)	[-0.136]	-0.012 (0.353)	[-0.930]
IntAudit	0.143*** (0.003)	[2.989]	-0.001 (0.939)	[-0.076]	0.131* (0.077)	[1.806]	0.077 (0.209)	[1.256]	-0.018 (0.655)	[-0.449]	-0.010 (0.373)	[-0.890]
Regbank	0.063 (0.795)	[0.259]	0.001 (0.975)	[0.031]			0.428 (0.402)	[0.839]			-0.050 (0.420)	[-0.806]
Fage	0.001 (0.873)	[0.160]	0.000 (0.959)	[0.051]	0.030* (0.062)	[1.903]	-0.017* (0.064)	[-1.852]	0.013* (0.084)	[1.761]	0.002 (0.144)	[1.462]

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Fsize	-0.005	[-0.280]	0.001	[0.452]	-0.106*	[-1.788]	-0.117***	[-3.339]	-0.117***	[-3.109]	-0.007	[-1.323]
	(0.780)		(0.651)		(0.079)		(0.001)		(0.003)		(0.186)	
Lev	-0.295***	[-2.895]	-0.033**	[-2.212]	-0.065	[-0.270]	0.152	[1.057]			0.047**	[1.981]
	(0.004)		(0.027)		(0.788)		(0.290)				(0.048)	
Constant	1.306***	[3.709]	0.020	[0.375]	0.314	[0.316]	0.259	[0.414]	2.198***	[3.319]	0.171*	[1.949]
	(0.000)		(0.707)		(0.753)		(0.679)		(0.002)		(0.051)	
year dummies	yes		yes		yes		yes		yes		yes	
organisation type dummies	yes		yes		no		yes		no		yes	
firm fixed-effects	no		no		yes		no		yes		no	
Number of observations	294		294		295		296		297		297	
R-squared	0.151		0.091		0.151		0.150		0.165		0.0328	
F statistic					1.835*				1.961**			
Wald Chi-squared statistic	65.32***		39.80**				82.14***				31.20	
Number of clusters					54				54			

Note: This table presents the results of the relationship between corporate governance and financial performance of MFIs in Sri Lanka. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). *p*-Values are presented in parentheses and based on robustness standard errors corrected for potential heteroskedasticity and serial correlation in the error term. *t*-Statistics are reported in brackets. The notations are defined in Table 4.6-1. Year dummy 2007 and organisation-type dummy private companies are treated as the benchmark categories to avoid the dummy variable trap. Year dummies and organisation-type dummies are unreported.

6.6.2 Empirical results for financial performance

Empirical results of the multiple regression analysis are shown in Table 6.6-2 after controlling for unobserved heterogeneity in the context of the panel data model. The sign of coefficients are as expected but only a few are statistically significant in relation to the financial performance of MFIs in Sri Lanka, which is also predominantly aligned with prior studies. Only statistically significant financial performance variables are discussed below.

Female directors (*FemDir*) on the board are significantly negatively correlated ($t=-2.17, p=0.05$) only with *OSS* and it is similar to the studies conducted by Hewa-Wellalage and Locke (2013) for Sri Lankan listed companies, and Adams and Ferreira (2009) for the US market. This suggests that MFIs have better financial performance if they have fewer female representatives on their boards. A rationale posited for the negative impact of women directors on MFI performance flows from their domestic responsibilities which are an outcome of their commitment to the family and communities (Boehe & Cruz, 2013). Especially in the South Asian region, women have more unpaid work to do at home, such as bringing up their children, preparing food, and managing the household rather than performing on a board. Cultural differences may also impact women's managerial activities as it develops in synchronisation with the culture. Normally when there is a male-dominant society, women are subordinate to males and often silent and inactive representatives on the board (Hewa-Wellalage & Locke, 2013). As a result, their impact on financial performance is likely to be minimal. It is therefore likely to infer from this study that further research has to be conducted to grasp the relationship between female directors on a board and MFI financial performance in Sri Lanka.

However, female CEO (*FemCEO*) is statistically significantly positively correlated ($t=2.24, p=0.05$) with *OSS* of the firm and it is consistent with the prior MFI research findings of Mersland and Strøm (2009) and Strøm et al. (2014). This study also finds that female chair (*FemChair*) has a great level of positive association ($t=1.85, p=0.10$) with *ROA*. These findings support the expected relationships, that there will be a positive relationship between female leadership and MFI performance. The evidence of this study on female leadership confirms the general

propositions of Shrader, Blackburn, and Iles (1997); Smith et al. (2006); Kyereboah-Coleman (2006); and Welbourne (1999), that females in management have a positive impact on firm performance but this is not supported by women representatives on the board. However, as discussed below, having women on MFI boards is significantly positively correlated with female client outreach in Sri Lanka.

CEO/chair duality (*Duality*) is statistically significantly positively correlated with *YOGLP* ($t=1.72, p=0.10$) and *OCR* ($t=1.97, p=0.05$). This highlights that duality will increase an MFI's income generation ability on its loan portfolio. But, it is difficult to say that the MFI will be better governed when the CEO and chair are the same person. Findings reveal that the operating cost (agency cost) will increase when the same person is doing both roles, because the CEO can fix a higher compensation level with the approval of board members (Core et al., 1999). Furthermore, there is no statistically significant relationship in the negative correlations with *OSS* and *ROA*. These findings are consistent with Mersland and Strøm (2009) and Brickley, Coles, and Jarrell (1997), suggesting that it is not strongly indicated that the CEO and chair separation will result in improved governance for MFIs. Similarly, the results do not find statistically significant evidence to support the proposition that CEO/chair duality is inversely correlated with firm performance.

Contrary to Oxelheim and Randøy (2003) but agreeing with Mersland and Strøm (2009), this study finds that international directors and/or donor agency representatives (*IntDorDir*) on the board reduce ($t=-2.03, p=0.05$) MFI financial performance through *ROA* as they are more concerned with improving outreach of the firm without considering profit-making ability. One of the main objectives of international donor agencies who provide funds for MFI operations is to improve the living standards of the poor people in developing countries. They are aware of the high risk in the industry and do not expect any direct financial returns from their funds/donations. On the other hand, this may also indicate international directors and donor agency representatives have less knowledge about the local clients and may threaten the ongoing solvency of the MFI. This indicates that the MFI board improves its performance when it consists of local directors.

Furthermore, findings of this study reveals that the directors who represent their clients (*ClientDir*) increase the MFI financial performance as it is statistically significantly positively associate with *ROA* ($t=2.90, p=0.01$). This supports the expected relationship between the two variables and consistent with prior studies of Mori and Mersland (2014) and Hartarska (2005), who suggest that the client representatives on boards improves the MFI sustainability by having a better relationship with MFI clients.

According to good governance wisdom, a board is presumed to be better when it has outside/independent representatives on the board. Based on the findings in the study, this perspective is reflected with *CA* as it is statistically significantly positively correlated ($t=2.24, p=0.05$) to outside/independent directors (*IndDir*) but statistically significantly negatively correlated with *OSS* ($t=-1.91, p=0.10$) and *YOGLP* ($t=-1.99, p=0.10$). Even though outside directors are important for improving capital structure, they do not assist MFIs to progress their key financial performance (*OSS* and *ROA*). This study suggests that MFI boards in Sri Lanka will be better off when they have more executive directors than non-executive directors, presumably because executive directors are highly conscious of the operational activities in the firm. Similarly, non-executive directors may lack knowledge about the firm and industry and play a token role without adding any value to the firm (Nguyen et al., 2014).

Hartarska (2005) and others suggest that firm performance can improve with smaller boards. Evidence for MFIs in Sri Lanka does not support this view as the coefficients are negative in the analysis, although not statistically significant. Further, this study shows a statistically significant negative relationship ($t=-1.76, p=0.10$) with *OCR* indicating that smaller boards (*Bsize*) are more costly than larger boards. On the other hand, it suggests that by providing effective monitoring, members of larger boards may voluntarily reduce the excessive operating costs of an MFI. Mersland and Strøm (2009) also find a negative relationship between board size and MFI performance, however, it was not statistically significant with any regressors.

Results of this study indicate a statistically significant positive relationship between internal audit function (*IntAudit*) and financial performance of MFIs in Sri Lanka

in relation to *OSS* ($t=2.99, p=0.01$) and *YOGLP* ($t=1.81, p=0.10$) and supports the expected relationship between two variables. This result is also consistent with Mersland and Strøm (2009), who state that a board will probably be better informed if it has been briefed through an internal board auditor, and this is reflected in regard to *OSS*. Additionally, this study finds there is no statistically significant relationship with corporate governance variables and portfolio at risk at 30 days (*PAR*) in Sri Lankan MFIs. As per the descriptive findings, even though Sri Lankan MFIs' credit risk is considerably higher than their counterparts in other countries, it is not due to the governance practices of Sri Lankan MFIs.

6.7 Multiple Regression Analysis for Outreach

6.7.1 Selection of regression model

Table 6.7-1 depicts the multiple regression results for fixed-effect and random-effect approaches. The Hausman test result suggests that it is important to employ a fixed-effect model for *Depth* variable due to the rejection of the null hypotheses where *p*-values are significantly lower than the 0.05 level. The random-effect model has been employed for both *Breadth* and *FemBorr* variables because they fail to reject the null hypotheses.

Table 6.7-1: Selection of fixed or random effect model

Dependent Variables	Prob>chi2	Hausman Test Result
Breadth	0.4844	Random-effect Model
FemBorr	0.1883	Random-effect Model
Depth	0.0083	Fixed-effect Model

Note: This table presents the Hausman test results for outreach variables. The notations are defined in Table 4.6-1.

The Breusch and Pagan LM test for random effects has been used as a robustness check to see whether the choice of the random-effect model for *Breadth* and *FemBorr* dependent variables is appropriate. The test result ($Prob > chi^2 = 0.00$)

suggests that a pooled regression model is not appropriate for *Breadth* and *FemBorr* dependent variables as it has been rejected at 5% significance level. The alternative random-effect model is accepted as an appropriate model to represent the data.

6.7.2 Empirical results for outreach

Table 6.7-2 illustrates the empirical results of a multiple regression analysis of outreach variables in this study. These are from a regression of the whole dataset and controlling unobserved heterogeneity in the panel model. Even though most of the signs of the coefficients generated from the regression have the expected signs, very few are significant for outreach of Sri Lankan MFIs. However, interesting discoveries appear in both of these significant and non-significant regression results.

Female directors (*FemDir*) on the board are statistically significantly negatively correlated ($t=-1.80$, $p=0.10$) with *Breadth* of outreach, and significantly positively correlated ($t=2.10$, $p=0.05$) with percentage of female borrowers of total active borrows (*FemBorr*) in Sri Lankan MFIs. These findings indicate that the female directors appear to concentrate on gender inequality in the country and promote microfinance loans to more female clients. Males have a wide range of sources from which to access credit but most women receive their first loan from an MFI.

Even though Mersland and Strøm (2009) argue that female CEOs (*FemCEO*) are better informed, which will result a greater outreach, they did not find significant coefficients for the relationship between female CEO and outreach. This study also finds no statistically significant relationship between those two variables.

The results for female directors on a board are opposite for a female chairperson (*FemChair*) on a board. The female chairperson on a board is statistically significantly positively correlated ($t=2.81$, $p=0.01$) with *Breadth* of outreach but statistically significantly negatively correlated ($t=-1.80$, $p=0.10$) with female borrowers (*FemBorr*) in MFIs in Sri Lanka. Even though they are female leaders they appear to concentrate on increasing the number of active borrowers rather than increasing only women borrowers.

Table 6.7-2: The relationship between corporate governance and outreach of MFIs in Sri Lanka

Variables	Breadth		FemBorr		Depth	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]
FemDir	-0.376* (0.072)	[-1.800]	0.086** (0.036)	[2.094]	0.043 (0.172)	[1.383]
FemCEO	-0.003 (0.977)	[-0.028]	0.010 (0.621)	[0.495]	0.015 (0.231)	[1.211]
FemChair	0.253*** (0.005)	[2.813]	-0.032* (0.073)	[-1.795]	-0.010 (0.441)	[-0.777]
Duality	0.034 (0.725)	[0.352]	-0.026 (0.173)	[-1.363]	-0.022 (0.106)	[-1.647]
IntDorDir	-0.009 (0.926)	[-0.093]	0.047** (0.017)	[2.394]	-0.006 (0.551)	[-0.600]
ClientDir	-0.201* (0.059)	[-1.886]	0.034 (0.100)	[1.643]	0.021 (0.175)	[1.374]
IndDir	-0.052 (0.848)	[-0.191]	-0.028 (0.601)	[-0.524]	0.013 (0.730)	[0.347]
Bsize	-0.099 (0.382)	[-0.874]	-0.007 (0.770)	[-0.292]	0.003 (0.816)	[0.234]
IntAudit	-0.051 (0.562)	[-0.581]	0.023 (0.193)	[1.302]	0.006 (0.487)	[0.701]
Regbank	-0.201 (0.774)	[-0.287]	-0.018 (0.903)	[-0.121]		
Fage	-0.001 (0.921)	[-0.100]	0.005* (0.086)	[1.719]	-0.013*** (0.000)	[-4.189]
Fsize	0.802*** (0.000)	[15.980]	0.024** (0.020)	[2.321]	0.015 (0.292)	[1.065]
Lev	0.237 (0.238)	[1.179]	0.037 (0.352)	[0.930]	-0.022 (0.316)	[-1.012]
Constant	-6.062*** (0.000)	[-7.281]	0.306* (0.074)	[1.786]	-0.000 (0.998)	[-0.002]
year dummies	yes		yes		yes	
organisation type dummies	yes		yes		no	
firm fixed-effects	no		no		yes	
Number of observations	294		297		295	
R-squared	0.413		0.157		0.243	
F statistic					4.135***	
Wald Chi-squared statistic	651.71***		79.08***			
Number of clusters					54	

Note: This table presents the results of the relationship between corporate governance and outreach of MFIs in Sri Lanka. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). *p*-Values are presented in parentheses and based on robustness standard errors corrected for potential heteroskedasticity and serial correlation in the error term. *t*-Statistics are reported in brackets. The notations are defined in Table 4.6-1. Year dummy 2007 and organisation-type dummy private companies are treated as the benchmark categories to avoid the dummy variable trap. Year dummies and organisation-type dummies are unreported.

The international/donor directors (*IntDorDir*) have a statistically significant positive ($t=2.39$, $p=0.05$) association with female borrowers (*FemBorr*) which shows that directors who represent international and/or donor agencies are engaged in providing microcredit to women in Sri Lanka. This suggests that when international and/or donor representatives sit on MFI boards they are able to provide better monitoring and advisory services to improve women's empowerment. However, the results of this study show that directors who represent clients (*ClientDir*) are statistically significantly negatively ($t=-1.89$, $p=0.10$) associated with the number of active clients (*Breadth*) in MFIs in Sri Lanka. This is not astonishing as similar results were obtained by Mori and Mersland (2014) and Hartarska (2005). It is likely to infer from this finding that the representatives of clients on boards improve the MFI profitability at the expense of *Breadth* of outreach. Hartarska (2005, p. 1639) explains that these stakeholder representatives on MFI boards "may have engaged in rent-seeking behaviour, by promoting lending to wealthier borrowers".

Other corporate governance variables such as *Duality*, non-executive directors on board (*IndDir*), number of board members (*Bsize*) and internal audit function (*IntAudit*) are not statistically significantly impacting the outreach of MFIs in Sri Lanka. The number of MFIs that either have an internal audit function or are regulated under banking authority are very few and their impact on outreach is also negligible.

Interestingly, *Depth* of outreach does not have any significant relationship with corporate governance variables but does have a significant negative relationship with firm age (*Fage*), suggesting that as MFIs mature their attention toward outreach to poor people increases.

6.8 Conclusion

This chapter contains a discussion of the background information of MFIs in Sri Lanka and the empirical analysis of corporate governance and both financial performance and outreach of MFIs in Sri Lanka. This chapter emphasises guidance for selecting directors for MFI boards based on a board's characteristics. In relation

to the traditional internal and external corporate governance mechanisms, this study finds only a few variables that influence the key financial performance and outreach of MFIs. Even though most of the signs of the coefficients generated from the regression analysis are consistent with theory, very few are statistically significant. Internal audit function, local directors, executive directors, female CEOs, female chair and client representatives on the board are found to positively influence the MFIs' financial performance, while female directors, female chair, and international and donor directors are found to positively influence outreach of Sri Lankan MFIs.

The results also show a statistically significantly negative relationship between female directors on board, and financial performance and *Breadth* of outreach. Even though more than 30% of women are participating in Sri Lanka's labour force (Department of Census and Statistics, 2011), very few have specialist managerial skills. Hence, the proportion of non-specialised female directors serving on MFI boards may higher than males (Hewa-Wellalage & Locke, 2013). It is noteworthy for MFIs' to consider more training and mentoring activities for female directors to increase their involvement in improving financial performance and outreach of MFIs. However, women's success in the workplace is always shaped by an array of cultural expectations, domestic responsibilities and self-perception (Women's World Banking, 2013). In countries such as Sri Lanka, women often kept busy with family responsibilities and commitments. Therefore their impact on MFI financial performance and outreach is likely to be minimal. To build more effective and efficient diverse boards, MFIs need to consider these circumstances and develop women's skills by having proper training and consultation.

Although there are only a small number of statistically significant results, it does point towards the view that corporate governance does matter for the financial performance of MFIs. Moreover, the evidence presented in this chapter should encourage MFIs to consider further significant governance factors which will improve and sustain the industry. Also, it would have been more appropriate to have MFI governance studies in different countries to validate the findings of this study. Therefore, in the next chapter, research is presented from Indian MFI data analysis to complement the strength this chapter's conclusion.

CHAPTER SEVEN

CORPORATE GOVERNANCE AND PERFORMANCE IN MFIS IN INDIA: AN EMPIRICAL INVESTIGATION

7.1 Introduction

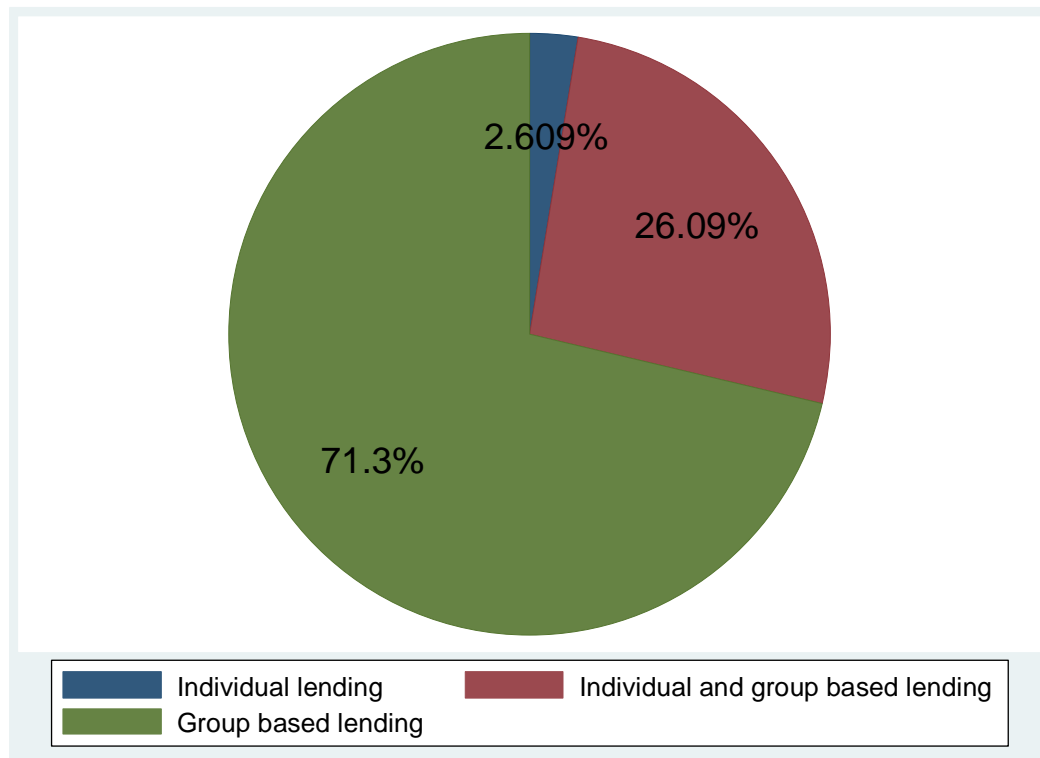
In Chapter 6 the discussion focused on how corporate governance practices impact the performance of MFIs in Sri Lanka. This chapter examines the Indian context. India has a large number of MFIs and may provide a useful comparison with Sri Lanka. An overview of the microfinance sector in India provides a starting point for the analysis. This is followed by an analysis of how corporate governance relates to the financial performance and outreach of the MFIs. The findings presented in Chapter 7 then compare with Chapter 6 findings to understand the differences. The chapter concludes with suggestions for changes in corporate governance practices that may favourably impact the performance of MFIs in India.

7.2 Background of Indian MFIs

A sample of 113 Indian MFIs is examined in this study from 2007 to 2012. Unlike the Sri Lankan MFIs, and other MFIs in Central and Eastern Europe and Newly Independent States, more than 70% of MFIs in India apply group-based lending methods for their clients. This is the basis for microfinance lending suggested by the Grameen Bank Bangladesh (See Figure 7.2-1). As noted by Bassem (2009), of 42 MFIs in Euro-Mediterranean countries, 73% of them concentrate on individual lending methods when providing loans to their borrowers. In contrast, only 3% of institutions in the Indian sample provide individual loans to their customers and 26% of institutions provide both individual and group based loans to their clients (See Figure 7.2-1). Such striking differences in lending methods between countries may have significant impacts for MFI performance. Mersland and Strøm (2009) study the impact of lending patterns on performance and find that individual loans are not a significant variable in relation to performance measures such as ROA and

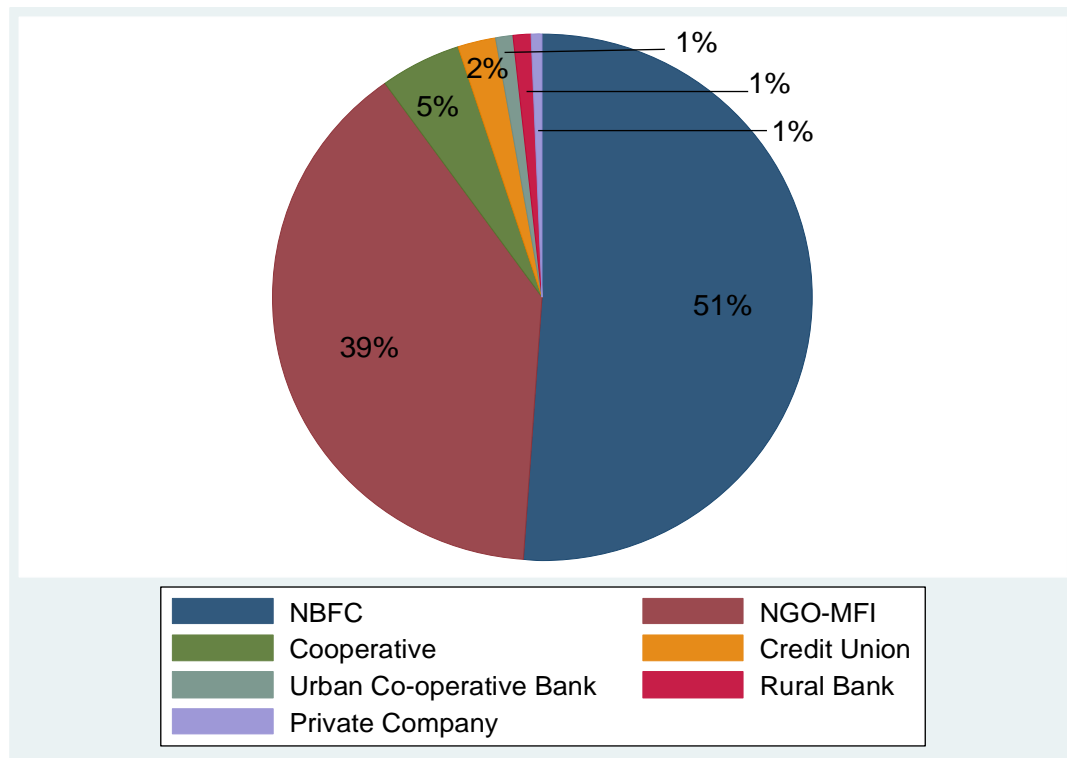
OSS and suggest that the MFIs can improve their performance with either individual and/or group lending methods.

Figure 7.2-1: Lending Method of MFIs in India



MFIs in India can take many different organisational forms ranging from non-profit organisations to for-profit companies. Among the many forms, the percentage of NBFC is very high, at 51%, when compared to the other types of institutions depicted in Figure 7.2-2, according to Microfinance India State of the Sector Report 2011 (Srinivasan, 2011). By contrast NGO-MFIs cover the highest contribution for this sector in Sri Lanka and some other countries. A likely reason for the high number of NBFCs in India is that they may obtain a range of benefits from the RBI. When the MFI is registered as an NBFC under the RBI in India, it can access formal funding such as bank finance through initiation of priority sector lending mandated by the RBI.

Figure 7.2-2: Organisation Types of Indian MFIs



7.3 Descriptive Data Analysis

Descriptive statistics for MFI financial performance, outreach, corporate governance and control variables relating to this study, for the period 2007 to 2012, in India are presented in Table 7.3-1.

In relation to financial performance indicators, MFIs in this sample appear to be financially stable as indicated by their *OSS* (mean=1.12). This finding is consistent with the empirical findings by Mersland and Strøm (2009), Tchakoute-Tchuigoua (2010) and Strøm et al. (2014). Mersland, Randøy, and Strøm (2011) indicate that the mean value of *OSS* is 1.13. This *OSS* is greater than 1.0 suggesting that 379 MFIs in 73 countries are able to meet their obligations. Tchakoute-Tchuigoua (2010) states that the *OSS* value of a worldwide sample of 202 is around 1.15. Strøm et al. (2014) find a slightly higher value (1.23) for their study of 329 MFIs in 73 countries, including 30 Indian MFIs. However, the minimum and the maximum value of *OSS* in Table 7.3-1 ranges between 0.01 and 3.36.

Table 7.3-1: Descriptive statistics for Indian MFIs where n=575

Variables	Acronyms	Mean	Median	Std. Dev.	Min	Max
Financial Performance Variables						
Operational self-sufficiency	<i>OSS</i>	1.12	1.11	0.38	0.01	3.36
Return on assets	<i>ROA</i>	0.01	0.01	0.083	-0.36	0.38
Yield on gross loan portfolio	<i>YOGLP</i>	0.23	0.22	0.08	0.01	0.59
Operating expenses ratio	<i>OCR</i>	0.10	0.09	0.063	0.01	0.32
Capital asset ratio	<i>CA</i>	0.24	0.17	0.22	-0.77	1
Portfolio at risk more than 30 days	<i>PAR</i>	0.04	0.01	0.086	0	0.58
Outreach Variables						
Number of active borrowers		246575	44387	683292.9	31	6242266
Breadth of outreach [LN(Active borrower)]	<i>Breadth</i>	10.7	10.7	1.92	3.43	15.6
Female borrowers to active borrowers (%)	<i>FemBorr</i>	0.94	1	0.14	0.25	1
Depth of outreach (Average loan balance per borrower/GNI per capita)	<i>Depth</i>	0.21	0.15	0.57	0.02	8.75
Corporate Governance Variables						
Female directors on board (%)	<i>FemDir</i>	0.22	0.2	0.21	0	1
Female CEO	<i>FemCEO</i>	0.11	0	0.31	0	1
Female chairperson	<i>FemChair</i>	0.18	0	0.38	0	1
Duality	<i>Duality</i>	0.35	0	0.48	0	1
International directors and donor directors on board (%)	<i>IntDorDir</i>	0.16	0.1	0.2	0	1
Directors representing clients/borrowers (%)	<i>ClientDir</i>	0.04	0	0.11	0	0.82
Non-executive directors on board (%)	<i>IndDir</i>	0.56	0.6	0.2	0	0.9
Board size (No. of board members)	<i>Bsize</i>	7.05	7	2.65	2	19
Internal auditor reporting to board	<i>IntAudit</i>	0.63	1	0.48	0	1
Control Variables						
Regulated by banking authority	<i>Regbank</i>	0.53	1	0.5	0	1
Firm age (No. of Years)	<i>Fage</i>	9.17	8	7.06	1	38
Firm size [LN(Total assets)]	<i>Fsize</i>	19.7	19.6	1.86	14.6	24.7
Leverage	<i>Lev</i>	0.76	0.83	0.22	0	2.04

Note: This table reports the descriptive statistics based on the Indian MFI sample. The variables are defined in Table 4.6-1. For the descriptive purposes, number of active borrowers, international directors/donor representatives on board, client representatives on board and firm age are calculated on the basis of levels instead of dummy and logarithmic form. Only firm size is calculated based on logarithmic form.

The *ROA* value suggests that a large number of MFIs in the sample do not appear to pay their true cost of capital because the mean value is 0.6% which is a slightly positive value. Mersland et al. (2011) state that a large number of MFIs are not financially self-sufficient as their average *ROA* is 0.5%. The above results are similar to Strøm et al. (2014), with 0.4% for 329 MFIs in 73 countries, including approximately a 9% representation of Indian MFIs in the total sample. The minimum and the maximum value of Indian MFIs' *ROA* ranges from -0.36 to 0.38. This level of high negative value occurs due to the greater provisions for bad and doubtful loans and loan losses.

The average *YOGLP* value of 23% is relatively small when compared to world statistics. Prior studies conducted by the Mori and Mersland (2014) and Mersland and Strøm (2009) find that the portfolio yield of those MFIs is between 30% and 40% which is not a surprising value for the microfinance sector. Half of the Indian MFIs in the sample are able to achieve 22% yield from their loan portfolio, with the lowest portfolio yield being 1% and the highest 59%.

Similarly with *YOGLP*, the *OCR* value of 10% is also comparatively lower than world statistics (Mersland & Strøm, 2009; Mori & Mersland, 2014). On average, operating cost to average gross loan portfolio ratio is 32.9% for about 202 MFIs in a global dataset. Mersland and Strøm (2009) use 278 MFIs around the world and disclose that the operational cost to average gross loan portfolio of those MFIs is 31%. However, these calculations of *OCR* are based on average loan portfolio which is not the indicator suggested by the Microfinance Consensus Guidelines (2003).

The *CA* value of Indian MFIs is 24%, which is a little outside the suggested range of 10% and 20% for the banking sector. In addition, half of the MFIs in the Indian sample have *CA* of 17%, which is in the prescribed range. However, Hartarska and Nadolnyak (2007) find the average capital asset ratio for 114 MFIs in a cross-country sample is 48%, but this included only five Indian MFIs. This study reports a minimum value *CA* as negative (-77%) and maximum as positive (100%), which highlights that there are MFIs running entirely on shareholders' capital.

Indian MFIs have a healthy credit portfolio with a *PAR* greater than 30 days of 4%, which is well below the recommended norm of 10%. Nevertheless, there are

institutions that have low portfolio quality as the maximum *PAR* is 58%. African and South Asian MFIs also maintain a high portfolio quality, with an average *PAR* for more than 30 days of 4% and 5.1% respectively (Lafourcade et al., 2006).

In terms of outreach, the average number of credit clients (*Breadth*) in the sample is reported as 246,575 but the standard deviation is 683,293, the minimum is 31 and the maximum is 6,242,266, suggesting a significant dispersion in the number of credit clients for these MFIs. Similar situations are reflected in many MFIs around the world. To reduce dispersion in this variable the natural log is used. Results for Hartarska (2009) and Hartarska and Nadolnyak (2007) cross-country MFI studies indicate an average number of active borrowers of 6,864. Mori and Mersland (2014) find an average number of borrowers in a global sample to be 14,978, which is slightly larger than Mersland and Strøm (2009) who report 12,805. Indian MFIs have a large impact in terms of a world sample. After transforming breadth to natural log, the mean and the median values are both the same (10.7) and the standard deviation reduces to 1.92.

Female borrowers (*FemBorr*) in India constitute 94% of active credit clients which is significantly greater than the world average of 73% female customers (Mersland & Strøm, 2009). The maximum number of female clients is equal to one and it indicates that some MFIs in India exclusively allocate their loans to women clients. However, there are institutions which give some priority to male clients as the minimum number of female clients in this sample is 25%.

The average value of *Depth* of outreach which is computed as average loan balance per borrower divided by adjusted GNI per capita is 0.21. This provides an indication that poor borrowers are very well served (Bassem, 2009). Higher values would point to the MFIs serving more rich borrowers. Furthermore, 50% of the MFIs in India have a *Depth* of outreach 0.15 which is again a lower value, indicating support for the poor clients. These values are adjusted for the outliers in the income distribution in India. Tchakoute-Tchuigoua (2010) reports 0.86 as their depth of outreach for a worldwide sample of 202 MFIs from 2001 to 2006.

Corporate governance variables provide a wide range of values. Of the directors in the sample, there are 22% female (*FemDir*) directors. Catalyst census shows that in the USA in 2001 there were only 12.4% women directors in Fortune 500 companies

and 6.4% in UK companies in the same year (Singh & Vinnicombe, 2004). However, similar proportions are observed by Hartarska (2005) for MFI boards in Central and Eastern Europe and Newly Independent States. In addition, the highest number of female representatives on an MFI board in India is 100% and there are also boards without any female representation.

Leadership characteristics of the MFIs reveal that 18% of MFIs have a female chairperson (*FemChair*) and 11% have a female CEO (*FemCEO*). By comparison, in Ghana, around 50% of MFIs have a female as their CEO (Kyereboah-Coleman, 2006) which is a comparatively unexpected number when compared with the world data. Mersland and Strøm (2009) find in a worldwide dataset that female representation as a CEO is around 24%.

In terms of *Duality*, 35% of the firms have the one person as CEO and chairman. Agency costs associated with duality are being lowered by two thirds of the MFIs in this sample. Nevertheless, this is a large number when compared with worldwide MFI data but small when compared with Ghana.

Only 16% of the directors in the Indian MFI sample are classified as representatives of international and/or donor agencies (*IntDorDir*) while the average representation internationally is 57.6% (Mersland & Strøm, 2009). However, according to Hartarska (2005), in Central and Eastern Europe and Newly Independent States, the proportion of directors who represent the donors or grant-giving organisations is 18.3%. Surprisingly, half of the MFIs in the India sample have only 10% of directors who are international, representing the donor or grant-giving organisations.

Customer representation on boards (*ClientDir*) is 4% and on a par with Central and Eastern Europe and Newly Independent States (Hartarska, 2005). Mori and Mersland (2014) observe that the customer representation for a sample of 379 MFIs is 18% of total board members. The descriptive statistics in this study indicate that 50% of the MFIs do not have client representation on their boards. The maximum number on a board, however, records 82%, indicating that there are institutions that have a large proportion of client directors.

More than half of the board members do not have an overt affiliation with any stakeholders of their MFI (*IndDir* =56%) and this figure is similar to Hartarska (2005) findings of non-affiliated outsider directors in relation to Central and Eastern

Europe and Newly Independent States. The analysis determines that 50% of the MFIs in the sample have more than 40% representation of executive board members. However, the minimum and the maximum value of non-executive representation on the Indian MFI boards ranges between zero and 90%, showing a broad range.

The descriptive statistics also indicate that the average (medium) number of board members (*Bsize*) in the sample is approximately seven (7) with minimum of two and maximum of 19 members. There is a weak consensus in the literature about the optimal board size being seven or eight members (Jensen, 1993; Lipton & Lorsch, 1992). Mersland and Strøm (2009) find that most MFIs in the world have a board of 7-9 directors.

In this study, 63% of MFIs have an internal audit function (*IntAudit*) which is higher than the findings of Mersland and Strøm (2009) and Bassem (2009) who report 50% having an internal audit function, which may be indicative of its growing importance.

In terms of control variables represented in Table 7.3-1, 53% of MFIs are regulated under banking authority (*Regbank*) in India which is a greater number than MFIs in other countries (Bassem, 2009; Galema et al., 2012). For example, out of 329 MFIs in 73 countries (including 30 Indian MFIs), only 28% of them are regulated by banking authorities (Strøm et al., 2014). However, the proportions of regulated MFIs differ between countries due to the structure of regulation and differences in regulatory philosophy.

Summary statistics indicate that the MFIs, in the sample, are not as mature as the mean of 9 (median of 8) for the number of years incorporated (*Fage*) with a minimum of 1 and maximum of 38 years of operation. The institutional age of Indian MFIs is similar to Mersland and Strøm (2009) and Hartarska and Nadolnyak (2007) suggesting the world's MFIs are younger as their age is around nine years.

Firm size (*Fsize*) is measured by the natural log of total assets. The mean (median) log value of the total assets is 19.7 (19.6) with a minimum of 14.6 and a range of 10.1 (See Table 7.3-1).

As presented in Table 7.3-1, the debt (both mean and median) of the Indian MFI sample (*Lev*) is high (0.76 and 0.83 respectively) with values between zero and 2.04.

Value greater than 1 indicates negative assets due the accumulated losses are greater than equity capital.

7.4 Pair-wise Correlation

The pair-wise correlation matrix in Table 7.4-1 records the correlation coefficient between financial performance, outreach, corporate governance and control variables. The strength of correlation between dependent and explanatory variables suggests that the selected corporate governance variables in this study are interacting with the financial and outreach performance of MFIs in India. These significant relationships are investigated further using linear regression.

Table 7.4-1: Correlation matrix for variables

	OSS	ROA	YOGLP	OCR	CA	PAR	Breadth
OSS	1						
ROA	0.537***	1					
YOGLP	0.174***	0.113***	1				
OCR	-0.438***	-0.330***	0.498***	1			
CA	-0.000	-0.043	-0.028	0.191***	1		
PAR	-0.089**	-0.116***	0.070*	-0.088**	-0.120***	1	
Breadth	0.185***	0.092**	0.023	-0.212***	-0.174***	0.228***	1
BemBorr	-0.041	0.051	0.074*	0.077*	0.081*	-0.097**	0.062
Depth	0.104**	-0.034	-0.206***	-0.276***	-0.002	0.067	-0.195***
FemDir	0.025	-0.005	0.052	-0.033	-0.146***	0.057	-0.197***
FemCEO	-0.057	-0.084**	-0.037	-0.094**	-0.100**	0.176***	-0.034
FemChair	-0.002	-0.056	-0.031	-0.102**	-0.077*	0.028	-0.063
Duality	0.009	0.038	0.067	0.031	-0.040	0.121***	0.157***
IntDorDir	0.010	0.014	-0.074*	-0.131***	-0.045	0.070*	0.344***
ClientDir	0.119***	0.063	-0.089**	-0.219***	-0.149***	0.061	-0.102**
IndDir	-0.012	0.012	-0.014	-0.121***	-0.146***	0.026	0.227***
Bsize	0.171***	0.084**	-0.033	-0.241***	-0.213***	0.151***	0.150***
IntAudit	-0.060	-0.012	0.026	-0.006	0.103**	0.055	0.296***
Regbank	-0.066	-0.082**	-0.016	0.042	0.302***	0.050	0.431***
Fage	0.105**	0.101**	-0.014	-0.228***	-0.214***	0.297***	0.372***
Fsize	0.183***	0.062	-0.008	-0.282***	-0.150***	0.276***	0.929***
Lev	-0.006	0.037	0.030	-0.184***	-0.999***	0.124***	0.175***

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	BemBorr	Depth	FemDir	FemCEO	FemChair	Duality	IntDorDir
BemBorr	1						
Depth	-0.335***	1					
FemDir	-0.059	0.173***	1				
FemCEO	-0.019	0.297***	0.415***	1			
FemChair	-0.018	0.143***	0.419***	0.539***	1		
Duality	0.020	0.089**	-0.055	0.175***	-0.011	1	
IntDorDir	-0.002	0.087**	-0.015	0.103**	0.051	0.111***	1
ClientDir	-0.031	0.179***	0.328***	0.171***	0.247***	0.038	0.063
IndDir	0.009	0.125***	0.092**	0.122***	0.108***	-0.021	0.335***
Bsize	-0.071*	0.182***	0.301***	0.147***	0.157***	-0.070*	0.226***
IntAudit	0.042	-0.115***	-0.112***	-0.004	0.025	0.117***	0.277***
Regbank	0.062	-0.023	-0.292***	-0.005	-0.117***	0.150***	0.273***
Fage	-0.212***	0.057	0.186***	0.083**	0.168***	0.040	0.196***
Fsize	-0.045	0.130***	-0.115***	0.0797*	-0.008	0.201***	0.378***
Lev	-0.084**	-0.000	0.145***	0.098**	0.075*	0.042	0.046

	ClientDir	IndDir	Bsize	IntAudit	Regbank	Fage	Fsize	Lev
ClientDir	1							
IndDir	0.011	1						
Bsize	0.344***	0.353***	1					
IntAudit	-0.092**	0.113***	0.077*	1				
Regbank	-0.316***	0.099**	-0.175***	0.425***	1			
Fage	0.158***	0.226***	0.476***	0.121***	-0.089**	1		
Fsize	-0.049	0.269***	0.226***	0.273***	0.439***	0.419***	1	
Lev	0.146***	0.147***	0.211***	-0.100**	-0.297***	0.214***	0.151***	1

Note: This table reports the pair-wise correlation coefficients among the variables. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). The notations are defined in Table 4.6-1.

The correlations among independent variables have been considered in this study to detect multicollinearity among variables. Results recorded in Table 7.4-1 show that the largest correlation exists between *FemCEO* and *FemChair* (0.54) and for multicollinearity the value is below the threshold of 0.80, suggested by Gujarati and Porter (2004). Although initial indications suggest multicollinearity is not likely to be a serious problem for multiple regression analysis in this study, VIF is used for confirmatory testing of the presence of multicollinearity. According to Myers (1990), VIF value of 10 or above is a good indication of the presence of

multicollinearity among independent variables. The results presented in Table 7.4-2 show that all the independent variables had a VIF value of less than two except the *Regbank* variable which is just above two. Therefore, both tests suggest the likelihood of multicollinearity is low among the variables.

Table 7.4-2: Multicollinearity diagnostic tests

Variable	VIF
FemDir	1.55
FemCEO	1.65
FemChair	1.59
Duality	1.14
IntDorDir	1.35
ClientDir	1.34
IndDir	1.30
Bsize	1.70
IntAudit	1.31
Regbank	2.09
Fage	1.64
Fsize	1.97
Lev	1.25

Note: This table reports the VIF coefficients for explanatory variables. The notations are defined in Table 4.6-1.

7.5 Selection of Analysis Technique

Corporate governance factors in this research equation contain mixed interval/continuous and dichotomous/categorical independent variables. Both ANCOVA and multiple regression analysis techniques are utilised to check for differences in the results, which will then lead to further consideration of the most appropriate model. According to Table 7.5-1, results indicate that there is no apparent difference between these two methods. A multiple regression technique is chosen for further analysis of the data for corporate governance and firm performance.

Table 7.5-1: ANCOVA and multiple regression test

Dependent Variables	ANCOVA			Multiple Regression		
	<i>F</i> statistics	<i>P</i> value	Adj. R-squared	<i>F</i> statistics	<i>P</i> value	Adj. R-squared
OSS	2.11	0.002	0.043	2.11	0.002	0.043
ROA	1.20	0.238	0.008	1.20	0.238	0.008
YOGLP	3.73	0.000	0.099	3.73	0.000	0.099
OCR	9.12	0.000	0.246	9.12	0.000	0.246
CA	6.05	0.000	0.162	6.05	0.000	0.162
PAR	5.34	0.000	0.148	5.34	0.000	0.148
Breadth	36.09	0.000	0.584	36.09	0.000	0.584
FemBorr	10.02	0.000	0.265	10.02	0.000	0.265
Depth	13.38	0.000	0.332	13.38	0.000	0.332

Note: This table presents the test results for ANCOVA and multiple regression. The notations are defined in Table 4.6-1.

7.6 Multiple Regression Analysis for Financial Performance

7.6.1 Selection of regression model

The model formulation was examined for fixed-effect using a Hausman test and results are presented in Table 7.6-1. These suggest fixed-effect estimation procedures are preferable for *ROA* ($Chi\text{-}sq(13)=39.53; p=0.00$), *YOGLP* ($Chi\text{-}sq(13)=70.40; p=0.00$), *OCR* ($Chi\text{-}sq(13)=76.45; p=0.00$) and *PAR* ($Chi\text{-}sq(13)=27.08; p=0.01$) as *p*-values are significant and are lower than the 0.05 level. The Hausman test results also suggest that the random-effect estimation procedures are appropriate for *OSS* ($Chi\text{-}sq(13)=19.79; p=0.10$) and *CA* ($Chi\text{-}sq(13)=15.50; p=0.22$).

Table 7.6-1: Selection of fixed or random effect model

Dependent Variables	Prob>chi2	Hausman Test Result
OSS	0.1004	Random-effect Model
ROA	0.0002	Fixed-effect Model
YOGLP	0.0000	Fixed-effect Model
OCR	0.0000	Fixed-effect Model
CA	0.2153	Random-effect Model
PAR	0.0121	Fixed-effect Model

Note: This table presents the Hausman test results for financial performance variables. The notations are defined in Table 4.6-1.

The Breusch and Pagan LM test for random effects also confirm that it is appropriate to use the random-effects model for *OSS and CA* dependent variables. The test results ($Prob > Chi-sq=0.00$) suggest that the pooled regression model is not appropriate for *OSS and CA*. It is to be noted that alternative hypotheses were accepted, recommending use of a random-effects estimation procedure for *OSS and CA* variables.

7.6.2 Empirical results for financial performance

Table 7.6-2 presents the multiple regression results for the relationship between corporate governance and financial performance in relation to fixed-effects and random-effects estimation procedures. After controlling for the unobserved factors in the panel mode, this study reveals that best practice corporate governance mechanisms for for-profit firms in mature markets have little influence on performance of MFIs in India. Signs for coefficients are in the expected direction, i.e. positive or negative, but surprisingly few are statistically significant and predominantly align with prior studies. Therefore, the discussion below demonstrates statistically significant MFI financial performance.

Prior studies highlight that board diversity is significantly positively associated with the financial indicators of firm performance (Erhardt et al., 2003). Results reported in Table 7.6-2 also highlight that international/donor directors on boards (*IntDorDir*) improve financial performance, which is contrary to the findings of Mersland and

Strøm (2009) but aligns with the recent discussion on MFI board diversity and performance. The international/donor directors on boards are statistically significantly positively related with *ROA* ($t=2.12, p=0.05$) and desirably negatively related with *PAR* ($t=-1.84, p=0.1$). This supports the view that international directors and funding agencies are concerned with MFI sustainability and the cost of institutional failures. They bring broader talents and diverse experiences to the local MFIs in India. It is suggested by Schreiner (2002) that international/donor directors may require MFIs to get higher returns in order to be able to withdraw their international support and funding at a later stage.

Client representatives on the board (*ClientDir*) have a negative and statistically significant coefficient ($t=-1.70, p=0.1$), indicating that an increase in the level of *ClientDir* leads to a decline in *PAR*. Hartarska (2005) and Mori and Mersland (2014) find similar results for client representatives on boards. This category of board member may be seeking to increase sustainability and reduce the risk for the MFI by having a better relationship with their clients. The low level of *PAR* in the MFI helps to promote working capital by increasing the recovery rate of the MFI.

The variable *FemDir* (percentage of female directors on board) is statistically significantly negatively ($t=-1.76, p=0.1$) correlated with *YOGLP* and this is similar to Bassem (2009) and Hartarska (2005). This suggests that female directors on Indian MFI boards are associated with low interest returns. Women directors on MFI boards may fight for lower interest rates because most MFI clients are women and they confront many difficulties when paying high interest rates. The observed results may not prove popular with those who argue for gender equality on corporate boards.

Although Mersland and Strøm (2009) suggest that the financial performance of MFIs improves with a female CEO, no evidence to support the relationship between a female CEO (*FemCEO*) and financial performance is detected in this study. Similar to the finding in relation to women directors, the results for *FemChair* (female chairperson) are statistically significantly negative ($t=-1.73, p=0.1$) for *ROA*, suggesting that female chairpersons have lower incentives for MFI sustainability. Although corporate governance codes have highlighted inclusion of more women in boards, the above results suggest that their contribution to MFI

performance may have an industry effect which has hitherto not been adequately considered.

Bassem (2009) and Kyereboah-Coleman and Osei (2008) propose that MFI financial performance (OSS and ROA) depends on the larger board size (*Bsize*). In the microfinance sector, by moving towards larger boards there is an intention to reduce operating costs through more volunteer time and make better decisions through range of expertise. In this study, *Bsize* and financial performance of MFIs in India show a positive relationship with *OSS* and *ROA* but they are not statistically significant. It suggests that larger boards of directors have no effect on MFIs' financial performance. Findings of this study are more in line with Mersland and Strøm (2009) and can only be interpreted in the Indian context for the given time period.

Consistent with prior studies (Bassem, 2009; Hartarska, 2005; Kyereboah-Coleman & Osei, 2008), limited employee participation on MFI boards (*IndDir*) is statistically significantly positively ($t=1.72$, $p=0.1$) related to financial performance (*YOGLP*) which means that MFIs with more independent directors push for higher yield. Hartarska (2005) also emphasises that MFIs can benefit from more unaffiliated directors. Results confirm that MFI boards with a higher proportion of unaffiliated directors increases the loan portfolio's ability to generate financial revenue. A study conducted by Jackling and Johl (2009) for 180 top Indian companies listed on the Bombay Stock Exchange (BSE), suggests that a greater proportion of outside directors on boards is associated with improved firm performance.

Jackling and Johl (2009) further note that separating CEO and chairman roles does not improve performance. The nexus between *Duality* and financial performance for this study also suggests that separation of CEO and chairman roles do not statistically significantly enhance the performance of Indian MFIs. The study results are in agreement with those discussed by Baliga et al. (1996) and Dey et al. (2011). Breaking duality may not increase returns but may lower the prospects of fraud and failures, which have not been tested.

Table 7.6-2: The relationship between corporate governance and financial performance of MFIs in India

Variables	OSS		ROA		YOGLP		OCR		CA		PAR	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]
FemDir	0.072 (0.608)	[0.513]	0.013 (0.768)	[0.296]	-0.063* (0.081)	[-1.759]	-0.543 (0.109)	[-1.617]	-0.109 (0.171)	[-1.368]	-0.013 (0.767)	[-0.297]
FemCEO	-0.075 (0.180)	[-1.341]	0.003 (0.697)	[0.390]	-0.010 (0.495)	[-0.685]	-0.003 (0.970)	[-0.037]	-0.020 (0.484)	[-0.700]	0.008 (0.496)	[0.683]
FemChair	0.030 (0.538)	[0.616]	-0.013* (0.087)	[-1.728]	0.004 (0.732)	[0.343]	-0.057 (0.391)	[-0.860]	0.021 (0.413)	[0.819]	-0.006 (0.537)	[-0.619]
Duality	-0.001 (0.987)	[-0.016]	-0.004 (0.744)	[-0.327]	0.000 (0.987)	[0.016]	-0.034 (0.617)	[-0.502]	-0.003 (0.869)	[-0.165]	0.018 (0.142)	[1.479]
IntDorDir	0.054 (0.190)	[1.309]	0.032** (0.037)	[2.115]	-0.004 (0.801)	[-0.253]	-0.133 (0.154)	[-1.434]	-0.012 (0.606)	[-0.516]	-0.037* (0.068)	[-1.841]
ClientDir	0.031 (0.528)	[0.630]	0.013 (0.592)	[0.537]	-0.007 (0.754)	[-0.314]	0.084 (0.395)	[0.854]	0.010 (0.706)	[0.377]	-0.046* (0.092)	[-1.699]
IndDir	-0.082 (0.422)	[-0.802]	-0.020 (0.530)	[-0.630]	0.057* (0.088)	[1.719]	0.161 (0.531)	[0.628]	-0.010 (0.864)	[-0.171]	-0.009 (0.862)	[-0.174]
Bsize	0.008 (0.333)	[0.969]	0.003 (0.440)	[0.775]	-0.003 (0.315)	[-1.009]	-0.024 (0.283)	[-1.079]	-0.005 (0.286)	[-1.066]	-0.004 (0.357)	[-0.925]
IntAudit	0.017 (0.650)	[0.454]	0.021** (0.032)	[2.171]	0.013 (0.224)	[1.222]	-0.119* (0.094)	[-1.688]	-0.007 (0.707)	[-0.376]	0.008 (0.424)	[0.802]
Regbank	-0.451* (0.070)	[-1.812]	-0.005 (0.722)	[-0.357]	0.027 (0.200)	[1.290]	0.175 (0.427)	[0.797]	-0.030 (0.867)	[-0.168]	-0.017 (0.372)	[-0.897]
Fage	-0.013 (0.636)	[-0.473]	0.024 (0.112)	[1.603]	0.050*** (0.005)	[2.862]	0.269*** (0.022)	[2.327]	-0.003 (0.833)	[-0.211]	-0.029*** (0.041)	[-2.065]

Chapter 7 Corporate Governance and Performance in MFIs in India: An Empirical Investigation

Fsize	0.074*** (0.000)	[5.483]	0.034*** (0.000)	[4.512]	-0.015** (0.017)	[-2.419]	-0.263*** (0.000)	[-5.485]	-0.054*** (0.000)	[-7.039]	0.003 (0.563)	[0.580]
Lev	-0.186** (0.011)	[-2.532]	-0.078** (0.016)	[-2.449]	0.011 (0.612)	[0.509]	0.225 (0.283)	[1.080]			-0.005 (0.787)	[-0.271]
Constant	0.197 (0.557)	[0.588]	-0.647*** (0.000)	[-4.902]	0.383*** (0.001)	[3.514]	1.891** (0.031)	[2.182]	1.410*** (0.000)	[6.437]	0.071 (0.251)	[1.155]
year dummies	yes		yes		yes		yes		yes		yes	
organisation type dummies	yes		no		no		no		yes		no	
firm fixed-effects	no		yes		yes		yes		no		yes	
Number of observations	562		566		564		570		566		572	
R-squared	0.119		0.211		0.222		0.225		0.172		0.134	
F statistic			3.072***		4.686***		5.693***				0.863	
Wald Chi-squared statistic	60.24***								125.36***			
Number of clusters			113		113		113				113	

Note: This table presents the results of relationship between corporate governance and financial performance of MFIs in India. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). *p*-Values are presented in parentheses and based on robustness standard errors corrected for potential heteroskedasticity and serial correlation in the error term. *t*-Statistics are reported in brackets. The notations are defined in Table 4.6-1. Year dummy 2007 and organisation type dummy co-operatives are treated as the benchmark categories to avoid dummy variable trap. Year dummies and organisation type dummies are unreported.

In terms of the internal audit function (*IntAudit*), results indicate that an internal audit function is statistically significantly positively ($t=2.17, p=0.05$) related with *ROA* and statistically significantly negatively (desirably) related to *OCR* ($t=-1.69, p=0.1$). Hartarska (2005), Bassem (2009) and Mersland and Strøm (2009) also observed similar relationships and this suggests that MFIs in India will be better governed, with improved profits and reduced operational costs, when they have an internal audit function. Furthermore, this study does not find any statistically significant relationship between corporate governance practices and financial performance when *OSS* and *CA* are used as financial performance variables.

7.7 Multiple Regression Analysis for Outreach

7.7.1 Selection of regression model

Table 7.7-1 presented the Hausman test results for fixed-effect and random-effect approaches which are used to formulate the regression models. According to the test result, it is suggested that a fixed-effect estimation procedure is preferable for *Depth* ($Chi-sq(13)=40.74; p=0.00$) variable due to the rejection of the null hypothesis, as p -values are significantly lower than the 0.05 level, but a random-effect estimation procedure is appropriate for *Breadth* ($Chi-sq(13)=20.89; p=0.08$) and *FemBorr* ($Chi-sq(13)=19.00; p =0.12$) variables because of failure to reject the null hypotheses.

Table 7.7-1: Selection of fixed or random effect model

Dependent Variables	Prob>chi2	Hausman Test Result
Breadth	0.0752	Random-effect Model
FemBorr	0.1229	Random-effect Model
Depth	0.0001	Fixed-effect Model

Note: This table presents the Hausman test results for outreach variables. The notations are defined in Table 4.6-1.

As a robustness check, this study has used a Breusch and Pagan LM test for random effects to see whether the choice of the random-effect model for *Breadth* and

FemBorr dependent variables are appropriate. The test results ($Prob > \chi^2 = 0.00$) suggest that the null hypotheses of pooled regression model is not appropriate for *Breadth* and *FemBorr* dependent variables as it has been rejected at 5% significance level. The alternative hypothesis of random-effect model has been accepted and can be used as an appropriate estimation procedure to represent the data.

7.7.2 Empirical results for outreach

The multiple regression results using *Breadth*, *FemBorr* and *Depth* as dependent variables as proxies for outreach are reported in Table 7.7-2. There is a weak indication, not statistically significant, that female directors on boards increase the *Breadth* of outreach (number of borrowers). The sign is in accord with Bassem (2009) and Hartarska (2005) who find a statistically significant result. Having a higher proportion of women directors on the board (*FemDir*) is statistically significantly negatively ($t=-2.12, p=0.05$) associated with the average loan size on GNI per capita (*Depth*), which is again similar to those results reported by Bassem (2009) and Hartarska (2005), who have used GDP per capita to measure the *Depth*. This enviable significant negative coefficient indicates that having female directors on a board encourages MFIs to serve poorer clients. This is interesting, as it may appear that women representatives on boards have a social mission of pushing greater outreach for their poorer borrowers.

Conversely, results show that a female CEO (*FemCEO*) is statistically significantly negatively ($t=-2.88, p=0.01$) associated with the number of active clients (*Breadth*) of MFIs, which is contrary to the findings of Mersland and Strøm (2009) and may reflect a cultural difference among countries. A potential explanation is that the female CEO is very cautious about client creditworthiness when providing loans and favours catering to a smaller client group. Also female CEOs know that most female clients who gain access to a loan from an MFI sometimes have no control over their loans as their husbands or male family members make all the decisions about the loan while the women only bear the liability for repayment (Goetz & Gupta, 1996).

Table 7.7-2: The relationship between corporate governance and outreach of MFIs in India

Variables	Breadth		FemBorr		Depth	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]
FemDir	0.093 (0.682)	[0.410]	-0.011 (0.795)	[-0.260]	-0.500** (0.037)	[-2.116]
FemCEO	-0.244*** (0.004)	[-2.876]	-0.007 (0.620)	[-0.496]	0.120 (0.312)	[1.016]
FemChair	0.142* (0.061)	[1.870]	0.006 (0.671)	[0.424]	-0.099 (0.357)	[-0.924]
Duality	-0.046 (0.436)	[-0.780]	0.017 (0.115)	[1.574]	-0.011 (0.892)	[-0.137]
IntDorDir	0.123* (0.069)	[1.817]	0.023* (0.070)	[1.809]	-0.115 (0.208)	[-1.265]
ClientDir	-0.108 (0.176)	[-1.353]	-0.010 (0.503)	[-0.670]	0.055 (0.376)	[0.888]
IndDir	-0.228 (0.175)	[-1.356]	-0.010 (0.749)	[-0.319]	0.192 (0.321)	[0.998]
Bsize	-0.042*** (0.003)	[-2.971]	0.003 (0.192)	[1.304]	0.048*** (0.006)	[2.781]
IntAudit	0.165*** (0.004)	[2.845]	-0.021** (0.040)	[-2.057]	-0.077 (0.176)	[-1.361]
Regbank	0.809* (0.084)	[1.729]	-0.019 (0.858)	[-0.179]	-0.043 (0.541)	[-0.613]
Fage	0.085* (0.062)	[1.865]	-0.031*** (0.000)	[-3.484]	-0.118 (0.208)	[-1.266]
Fsize	0.873*** (0.000)	[38.687]	0.000 (0.909)	[0.114]	0.130*** (0.001)	[3.504]
Lev	0.275** (0.012)	[2.517]	-0.013 (0.480)	[-0.706]	-0.300* (0.085)	[-1.737]
Constant	-7.185*** (0.000)	[-11.927]	0.964*** (0.000)	[7.524]	-3.997*** (0.000)	[-5.353]
year dummies	yes		yes		yes	
organisation type dummies	yes		yes		no	
firm fixed-effects	no		no		yes	
Number of observations	565		571		569	
R-squared	0.763		0.103		0.231	
F statistic					8.035***	
Wald Chi-squared statistic	2981.22***		85.65***			
Number of clusters					113	

Note: This table presents the results of relationship between corporate governance and outreach of MFIs in India. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). *p*-Values are presented in parentheses and based on robustness standard errors corrected for potential heteroskedasticity and serial correlation in the error term. *t*-Statistics are reported in brackets. The notations are defined in Table 4.6-1. Year dummy 2007 and organisation type dummy co-operatives are treated as the benchmark categories to avoid dummy variable trap. Year dummies and organisation type dummies are unreported.

When performance is assessed by using *Breadth* as the outreach indicator, the association between corporate governance and performance is statistically significantly positively related with *FemChair* ($t=1.87, p=0.1$), *IntDorDir* ($t=1.82, p=0.1$), *IntAudit* ($t=2.85, p=0.01$). This indicates that increasing the leadership of women on the board and more international representation and/or donor agent participation in governance favourably impacts the outreach of MFIs. Furthermore, international/donor directors' (*IntDorDir*) representation on MFI boards improves ($t=1.81, p=0.1$) the female share of credit clients (*FemBorr*). This emphasises that the involvement of international/donor representatives on MFI boards could allow MFIs to serve more customers because international/donor representatives have inside information about the MFI enabling them to potentially provide additional funds, monitoring and advisory support (Mori & Mersland, 2014).

However, internal audit function (*IntAudit*) and *FemBorr*, which is statistically significantly negative ($t=-2.10, p=0.05$), suggests that internal auditors have more concerns about allocating microcredit to women clients. In terms of *Duality*, client representatives on board (*ClientDir*) and independent directors on board (*IndDir*) reveal no significant relationship with outreach of MFIs in India.

According to Table 7.7-2, board size (*Bsize*) is statistically significant with regards to MFI outreach. Findings show that oversized boards have a significant negative ($t=-2.97, p=0.01$) influence on active credit clients (*Breadth*) and are in line with the results reported by Kyereboah-Coleman and Osei (2008). Larger boards (*Bsize*) tend to serve less poor clients (*Depth*) in Indian MFIs ($t=2.78, p=0.01$), suggesting that bigger boards pay more attention to improving MFI sustainability by providing loans for the people who are not so vulnerable. Consistent with prior studies of Jensen (1993), Yermack (1996) and Eisenberg et al. (1998), MFIs must have smaller boards to provide better outreach to poor people.

7.8 Comparative Analysis between Sri Lankan MFIs and Indian MFIs

This section presents a cross-country comparative analysis of MFIs in Sri Lanka and India, emphasising similarities and differences in the corporate governance mechanisms, financial performance and outreach of MFIs in each country.

Unlike the Sri Lankan MFIs and other MFIs in Central and Eastern Europe and Newly Independent States, more than 70% of MFIs in India apply group-based lending methods when providing money for their clients (See Figure 7.2-1). In India, NBFC is the most important microfinance provider and the second largest is NGO-MFI (See Figure 7.2-2). However, NGO-MFIs make the highest contribution to the microfinance sector in Sri Lanka and in some other countries like Central and Eastern Europe and Newly Independent States.

This study uses *t*-test and *z*-test for the comparison of MFIs in Sri Lanka and India. Table 7.8-1 presents the two sample *t*-test which is used to compare the difference in population means of the continuous variables. In Table 7.8-2 the two sample *z*-test, which is used to compare the difference in population means of categorical variables, is shown. Consistent with Adams and Ferreira (2009), this study uses firm-year observations to conduct the *t*-tests and *z*-tests in order to capture both cross-sectional and time-series variances. Specifically, it tests the null hypothesis that there is no statistically significant difference between values of a given variable between the two countries.

The comparisons of performance reported in Table 7.8-1 show that MFIs in India have greater operational self-sufficiency, smaller operating costs, lower portfolio risk, more active borrowers and a higher percentage of women clients than the MFIs in Sri Lanka. MFIs in India are more self-sufficient (mean = 1.12) than Sri Lankan MFIs (0.99) and is above the threshold of 1. The average operating expenses ratio of 10% is also comparatively smaller than the Sri Lankan figure (mean = 16%) and the worldwide figures reported by Mersland and Strøm (2009) and Mori and Mersland (2014). The average portfolio at risk of more than 30 days is better for Indian MFIs, which maintain lower risk than the Sri Lankan MFIs which are far behind the threshold of 0.10. The average number of active borrowers (mean = 246,575) in Indian MFIs is 8.5 times greater than Sri Lanka (mean = 29,144). This may be a reflection of population density in India which is higher than Sri Lanka. The mean percentage of female borrowers to active borrowers in India is 94% and in Sri Lankan MFIs the average number of female borrowers represents 81% of the total number of credit clients.

Table 7.8-1: Two-sample *t*-test on the equality of population means (with unequal variances)

Variables	Mean values			<i>t</i> -Statistics
	India	Sri Lanka	Difference	
Operational self-sufficiency	1.12	0.99	0.130***	5.24
Return on assets	0.01	0.01	-0.007	-1.44
Yield on gross loan portfolio	0.23	0.25	-0.027***	-2.95
Operating expenses ratio	0.10	0.16	-0.052***	-7.61
Capital asset ratio	0.24	0.31	-0.069***	-4.01
Portfolio at risk more than 30 days	0.04	0.10	-0.057***	-8.96
Active borrowers (person)	246,575	29,144	217,431***	7.50
Female borrowers to active borrowers (%)	0.94	0.81	0.130***	10.41
Depth of outreach (Average loan balance per borrower/GNI per capita)	0.21	0.14	0.061***	4.19
Female directors on board (%)	0.22	0.43	-0.214***	-10.17
International directors/ donor representatives on board (%)	0.16	0.07	0.081***	5.48
Client/borrower representatives on board (%)	0.04	0.07	-0.031***	-3.03
Non-executive directors on board (%)	0.56	0.67	-0.109***	-7.22
Board size (No. of board members)	7.05	8.47	-1.421***	-5.09
Firm age (No. of Years)	9.17	12.8	-3.613***	-6.57
Leverage	0.76	0.69	0.069***	4.02

Note: This table shows the results of two-sample *t*-test on the equality of population means with unequal variances. The test is based on the null hypothesis that there is no statistically significant difference between the mean of a given variable for Sri Lanka and India (assuming that the two population variances are inhomogeneous). The firm-year observations for Sri Lanka are 300 and 575 for India. The variables are defined in Table 4.6-1. Asterisk indicates significance at 1% (***) level. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms.

During the period 2007-2012 MFIs operating in Sri Lanka have better portfolio yields, higher investment capital and greater coverage of poor borrowers than the Indian MFI sample (See Table 7.8-1). The average yield on gross loan portfolio value of 23% in India is a somewhat smaller value when compared to Sri Lankan findings (25%) and worldwide statistics (30%-40%). The capital asset ratio of Sri Lankan MFIs is 31% which is higher than that of Indian MFIs (24%). This indicates that Indian MFIs like to utilise more interest-bearing liabilities in their financial structure. This may be the consequences of the wide access to funding, including bank finances, which Indian MFIs enjoy. With 76% of total assets in Indian MFIs debt financed, this is statistically significantly higher than their Sri Lankan counterparts. A majority of Indian MFIs have applied for NBFC licenses from the RBI because they continuously rely on bank finances for their resource requirement (RBI, 2012a). Table 7.8-1 also shows that the depth of outreach in Sri Lanka is of statistically significantly smaller value than India, because Sri Lankan MFIs are catering for a niche of poorer clients than their Indian counterparts.

MFIs in India and Sri Lanka have a similar level of return on assets (See Table 7.8-1) as means of return on asset are not statistically significantly different. On average, both countries have approximately a 1% of return on asset which suggests that the profitability of MFIs in both countries is low. This may be acceptable where MFIs are not-for-profit organisations. The RBI (2012a) emphasises that even though the microfinance sector is growing rapidly, the financial performance has deteriorated marginally.

In a similar vein, this study investigates whether the corporate governance variables differ by country. All the corporate governance mechanisms in India and Sri Lanka are significantly different. The percentage of women representatives on Sri Lankan MFI boards is approximately 21 percentage-points higher than that of Indian MFIs. The lower number of women participating in Indian MFIs may reflect a cultural difference between the countries. Sri Lanka has had a more favourable women empowerment environment than its immediate neighbours India and Pakistan (Islam & Dogra, 2011).

The percentage of international directors and/or donor representatives on Sri Lankan MFI boards is nearly 8 percentage-points lower than that of Indian MFIs. Remarkably, 16% of the directors in the Indian MFI sample are classified as

representatives of international and/or donor agencies, which is almost double that of Sri Lanka. This suggests a higher level of international and/or donor agency involvement of Indian MFIs than Sri Lankan MFIs. The situation is reversed in terms of client representatives on MFI boards where it is 3 percentage-points higher in Sri Lanka than India. Customer representation on Indian MFI boards of 4% is equal to those in Central and Eastern Europe and Newly Independent States (Hartarska, 2005).

The percentage of non-executive directors on MFI boards in Sri Lanka, on average, is 11% higher than that of MFIs in India. The results show that more than half of the board members do not have an affiliation with any of the stakeholders in the MFIs in both countries and this figure is similar to Hartarska's (2005) findings. Also this higher percentage of non-executive directors on Sri Lankan MFIs is plausible because the board size of Sri Lankan MFIs, on average, is statistically significantly greater (mean = 8.47 persons) than their Indian counterparts (mean = 7.05 persons). With regard to using firm age in two countries, Table 7.8-1 depicts that, on average, MFIs in Sri Lanka are more mature than their Indian counterparts.

As a robustness test, a two-sample Wilcoxon rank-sum (Mann-Whitney) test, which does not require the normality assumption, is used to test the data used in the *t*-test. The null hypothesis of this test is that there is no statistically significant difference between the two median values of a given variable. The results of the Wilcoxon rank-sum test are similar to those of the *t*-test approach which suggests that the findings of the *t*-test approach are robustness.

Table 7.8-2 compares the proportions of the categorical variables between two countries by using a *z*-test on the equality of population proportions. As presented in Table 7.8-2, the seven categorical variables are dummy variables which take values of 1 and 0. Therefore, the mean value represents the proportion of a given observation that takes the value of one. Leadership characteristics of the MFIs reveal that 11% of Indian MFIs in the sample have a female CEO and 18% of them have a female board chairperson, which are lower than that of Sri Lankan MFIs. Women's leadership in Sri Lankan MFI boards is statistically significantly different from that of Indian MFIs. For CEO/chair duality, MFIs in India have a statistically significantly higher value (mean = 35%) than their counterparts in Sri Lanka (mean = 26%). The dummy variable of international directors and/or donor representatives

on MFI boards in India (mean = 54%) is statistically significantly different from that in Sri Lanka (mean = 21%). On an average basis, this 33 percentage-point difference reveals that the number of international directors and/or donor representatives on MFI boards in India is nearly 2.5 times higher than that of Sri Lanka. However, the directors representing clients of the MFIs in both countries do not show statistically significant difference, consistent with data suggesting client representation on MFI boards is uncommon in both countries. The 32 percentage-point difference for the internal audit function in favour of Indian MFIs is approximately double that of Sri Lanka's MFIs. Similarly, there is a 40 percentage-point distinction in the category of regulated by banking authority in favour of Indian MFIs, which is four times higher than their Sri Lankan counterparts.

Table 7.8-2: Two-sample z-test on the equality of population proportions

Variables	Proportions			z-Statistics
	India (N= 575)	Sri Lanka (N= 300)	Difference	
Female CEO (a dummy variable)	0.11	0.34	-0.231***	-8.34
Female chairperson (a dummy variable)	0.18	0.40	-0.228***	-7.35
Duality (a dummy variable)	0.35	0.26	0.085**	2.55
International directors / donor directors on board (a dummy variable)	0.54	0.21	0.329***	9.35
Directors representing clients/borrowers (a dummy variable)	0.21	0.24	-0.028	-0.95
Internal audit function (a dummy variable)	0.63	0.31	0.315***	8.84
Regulated by banking authority (a dummy variable)	0.53	0.13	0.402***	11.56

Note: This table presents the results of two-sample z-test on the equality of population proportions of the categorical variables. The test is based on the null hypothesis that the population proportions of a given categorical variable are equal across Sri Lanka and India. The firm-year observations for Sri Lanka are 300 and 575 for India. The variables are defined in Table 4.6-1. Asterisks indicate significance at 5% (**) and 1% (***) levels. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms.

Table 7.8-3: Summary of empirical results: A cross-country comparison

Determinants	Financial Performance Variables														Outreach				
	OSS		ROA		YOGLP		OCR		CA		PAR		Breadth		Femborr		Depth		
	SL	IND	SL	IND	SL	IND	SL	IND	SL	IND	SL	IND	SL	IND	SL	IND	SL	IND	
Female directors on board	-*	∅	∅	∅	∅	-*	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅
Female CEO	+*	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	-*	∅	∅	∅	∅
Female chairperson	∅	∅	+*	-*	∅	∅	∅	∅	∅	∅	∅	∅	∅	+*	+*	-*	∅	∅	∅
Duality	∅	∅	∅	∅	+*	∅	+*	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅
International/donor directors on board	∅	∅	-*	+*	∅	∅	∅	∅	∅	∅	∅	-*	∅	+*	+*	+*	∅	∅	∅
Directors representing clients	∅	∅	+*	∅	∅	∅	∅	∅	∅	∅	∅	-*	-*	∅	∅	∅	∅	∅	∅
Outside directors on board	-*	∅	∅	∅	-*	+*	∅	∅	+*	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅
Board size	∅	∅	∅	∅	∅	∅	-*	∅	∅	∅	∅	∅	∅	∅	-*	∅	∅	∅	+*
Internal audit function	+*	∅	∅	+*	+*	∅	∅	-*	∅	∅	∅	∅	∅	+*	∅	-*	∅	∅	∅

Note: This table presents the summary of empirical evidence of the relationship between corporate governance practices and financial performance and outreach of MFIs in Sri Lanka and India. This table is developed based on the results reported in Table 6.6-2, Table 6.7-2, Table 7.6-2 and Table 7.7-2. The variables are defined in Table 4.6-1. Symbols (+), (-) and (∅) represent positive, negative, and no significant relationships, respectively. Asterisk (*) indicates significance at the 10% level or better level. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms.

In Table 7.8-3, the sign of relationships between corporate governance practices, and financial performance and outreach of MFIs in Sri Lanka and India are presented. Female chair is statistically significantly positively related to financial performance of Sri Lankan MFIs but statistically significantly negatively correlated with financial performance of Indian MFIs. Similarly, international directors and/or donor representatives and the presence of outside directors on the board of Sri Lankan MFIs are significantly negatively correlated with financial performance, whereas they are statistically significantly positively correlated with financial performance of Indian MFIs. In terms of corporate governance structures, for both countries, this study finds that more gender diverse boards have a statistically significantly negative impact on financial performance. Client representatives on the board and internal audit function of MFIs in both countries show a statistically significantly favourable effect for financial performance. The figures in Table 7.8-3 point to female CEO, CEO/chair duality and board size having a significant influence on financial performance of MFIs in Sri Lanka, but not in Indian MFIs.

The breadth of outreach of MFIs in both countries improves when there is a female chair for the board. Similarly, the presence of international directors and/or donor representatives on boards is statistically significantly positively related to the proportion of female clients of MFIs in both countries. While client representatives on boards seem to have a statistically significantly negative influence on breadth of outreach of MFIs in Sri Lanka, there is no statistically significant effect on Indian MFI outreach. It is also evident that the proportion of female clients in Sri Lankan MFIs declines when there is a female chair. The evidence of this study highlights that female CEO, board size and internal audit function have a statistically significantly effect on outreach of MFIs in India, but have no effect on outreach in Sri Lanka. Even though female directors on Sri Lankan MFI boards are not correlated with growth of active borrowers, they do correspond with an improvement of the proportion of female clients in Sri Lankan MFIs. Consistently, the presence of female directors on Indian MFI boards supports greater depth of outreach. Finally, there is statistical evidence to support the contention that CEO/chair duality and the presence of outside directors on boards have no significant effect on outreach of MFIs in both countries at all.

7.9 Conclusion

Prior literature on corporate governance in the microfinance sector predominantly consists of consultancy reports and guidelines on how to structure the board of directors and their procedures and warnings about the impact of weak governance (Labie & Mersland, 2011). These reports do identify corporate governance as important for MFIs but more empirics are needed to support their recommendation. Few studies have been undertaken on the results of translating the traditional governance practices to the microfinance sector. This chapter has identified those corporate governance mechanisms that influence the financial performance and outreach of MFIs in India.

This chapter contains information on empirical findings of corporate governance – performance relationship of MFIs in India and a comparative analysis of findings in Sri Lanka and India. First, it gives a brief background of MFIs in India under different institutional characteristics and lending methods. Based on the descriptive statistics, this chapter highlights the nature of corporate governance structure, financial performance and outreach of MFIs in India. Inferential statistical analyses of the impact of governance structure on MFI performance are discussed. The results are demonstrated to be robustness with respect to controls for legal status, MFI age, size, leverage and type.

Even though the findings are mixed, a number of interesting results have emerged from the study. Some of the results are consistent with those reported in prior studies relating to corporate governance and MFI performance. In particular, Mersland and Strøm (2009), Bassem (2009) Mori and Mersland (2014) and Hartarska (2005) find international/donor directors, female directors on the board, female chair, board size and internal audit function have significant impact on MFI performance, which are significant in supporting the generalisability of the earlier studies. As advocated by policy papers in microfinance, it can be determined that corporate governance plays a significant role in the Indian microfinance sector which is similar to the findings for Sri Lanka.

It is clear from the analysis that the corporate governance–performance relationship of MFIs in Sri Lanka and India from a comparative perspective is not always driven by the same variables. Based on the multiple regression analysis of Sri Lanka and

India, findings discover that corporate governance structure and MFI performance vary across the two countries. It supports the view that the efficiency of corporate governance structure is highly dependent on country-specific institutional characteristics within which the MFI operates. Accordingly, it is important to check the validity of this statement by taking into consideration country-specific institutional characteristics in Sri Lanka and India when conducting cross-country corporate governance studies. Therefore, in the next chapter, both Sri Lankan and Indian MFI data has been used to understand the nature of corporate governance impact on performance of MFIs in the South Asian region, by incorporating the country specific characteristics.

CHAPTER EIGHT

CORPORATE GOVERNANCE AND PERFORMANCE IN MFIS: A CASE STUDY IN SRI LANKA AND INDIA

8.1 Introduction

The impact of corporate governance on firm performance for for-profit entities has been extensively examined by many scholars in recent years. Research on MFI performance in relation to the impact of corporate governance is a challenging area to be explored further. This chapter examines whether corporate governance indicators are related to performance measures of profitability and outreach of MFIs. A panel regression analysis of data for 167 MFIs over a period of six years from 2007 to 2012 based on secondary data collection is used. In this chapter, MFI data for two countries, Sri Lanka and India, which are both emerging markets in South Asia (Beirne, Caporale, Schulze-Ghattas, & Spagnolo, 2010) are combined. This facilitates identification of the impact of corporate governance on MFI performance in the South Asia region.

Corporate governance effects for MFIs in Sri Lanka and India individually are reported in Chapters 6 and 7. Chapter 7 concludes by noting that corporate governance structure varies between the two countries. This chapter estimates the corporate governance and performance relationship of MFIs, taking into account national-level governance characteristics. In addition, this chapter re-examines the corporate governance and performance relationship of MFIs in a dynamic framework by applying the system GMM method. This approach improves upon traditional estimation methods by controlling the likely sources of endogeneity.

8.2 National Governance Quality Variables

In addition to the firm-specific variables, emerging literature has identified country-level variables that may influence corporate governance studies (Aslan & Kumar,

2014; Filatotchev & Jackson, 2013; Kumar & Zattoni, 2013; van Essen et al., 2013). Aguilera and Jackson (2010) state that it is important to include country-specific traditions in corporate governance studies. Filatotchev and Jackson (2013) find that the legal system and institutional characteristics, which are external to the firm in a specific country, influence the effectiveness of particular governance practices in a firm. Kumar and Zattoni (2013) suggest that it is necessary to investigate the impact of country-level and firm-level variables in studies of corporate governance.

The implications arising from the regulation and commercial environment of MFIs cannot be ignored in the governance framework (Varotttil, 2012). It is argued that better country level reforms can improve MFI performance (Christen & Rosenberg, 2000; Hardy et al., 2003; Jansson et al., 2004; Sinclair, 2012). In MFI governance-performance cross-country studies, Bassem (2009), Strøm et al. (2014) and Hartarska (2005) observe the importance of incorporating country-specific variables to control the differences in economic, social and legal environmental conditions across countries. Hartarska's (2005) empirical research findings for Central and Eastern Europe and the Newly Independent States reveal the significance of controlling for cross-country differences. This is confirmed by Bassem (2009) in a study of Euro-Mediterranean countries. These prior studies point to the need when considering governance-performance relationships to include both country-level and firm-level variables in the analysis of Sri Lanka and India.

Recent empirical studies (Aslan & Kumar, 2014; Nguyen, Locke, & Reddy, 2015b; van Essen et al., 2013) highlight how the relationship between corporate governance and firm performance may be affected by the quality of national governance mechanisms, such as legal system, rule of law and political situation, as they may influence the effectiveness of firm-level corporate governance strategies. This current study also investigates whether the relationship between corporate governance and MFI performance varies according to the quality of national governance systems in which MFIs operate in Sri Lanka and India.

The national governance quality is measured by using the Worldwide Governance Indicators, which consist of six broad dimensions of governance: *Voice and Accountability (VA)*, *Political Stability and Absence of Violence/Terrorism (PS)*,

Government Effectiveness (GEF), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (Kaufmann, Kraay, & Mastruzzi, 2014). The national governance indicators are constructed using an unobserved component methodology, which is presented in units, ranging from approximately -2.5 (weak governance performance) to 2.5 (strong governance performance). This is the leading index as it is most widely used for cross-country comparative studies (Ngobo & Fouda, 2012).

Table 8.2-1: The percentile ranks of governance indicators for Sri Lanka, India and South Asia in year 2012

Governance Indicator	Percentile Rank		
	Sri Lanka	India	South Asian Region
Voice and accountability (VA)	29.86	58.77	32
Political stability and absence of violence/terrorism (PV)	23.22	11.85	21
Government effectiveness (GE)	45.93	47.37	35
Regulatory quality (RQ)	48.33	33.97	27
Rule of law (RL)	52.13	52.61	33
Control of corruption (CC)	51.67	34.93	33

Note: This table presents the percentile rank of governance indicators which ranges from 0 (lowest) to 100 (highest) among all countries worldwide. These ranks indicate the percentage of countries worldwide that rate below the selected country, which is Sri Lanka or India or South Asia. The list of countries in the South Asia region is available at <http://www.worldbank.org/en/region/sar>. The data are extracted from the “Aggregate Indicators of Governance 1996-2013” (Kaufmann, Kraay, & Mastruzzi, 2009).

Table 8.2-1 provides the percentile rank of national governance indicators for Sri Lanka, India and the South Asia region in 2012. It indicates that the national governance rankings of Sri Lanka and India are higher than the average ranking of countries in the South Asian region, with the exception of two indicators. For the voice and accountability indicator, Sri Lanka has a lower value than the average ranking of South Asia whereas India reports the highest value among others. However, India lags far behind Sri Lanka and other South Asian countries in

political stability and absence of violence/terrorism national governance indicators. Sri Lanka has the highest value for regulatory quality indicator and the second highest for the control of corruption. India shows the second highest value for rule of law governance indicator when compared with other countries in the region. This supports a view that Sri Lanka and India have further developed national governance systems than other countries in the South Asia Region.

Following a similar approach undertaken by Nguyen et al. (2015b), van Essen et al. (2013) and Knudsen (2011), this study focuses on narrower measures of national governance quality that are more pertinent to firm operations. Accordingly, among these six national governance indicators, three dimensions, namely government effectiveness, regulatory quality and rule of law, are singled out. These indicators are necessary for successful operation of a business and they have the potential to impact firm performance (Krivogorsky & Grudnitski, 2010; Nguyen et al., 2015b). Kaufmann, Kraay, and Mastruzzi (2011, p. 223) declare that government effectiveness (GE) captures “the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies”. Regulatory quality (RQ) captures “the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development”. Rule of law (RL) captures “the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence”.

However, Globerman and Shapiro (2002) state that all these indicators are highly correlated with each other and it is difficult to use all indicators in a single regression. These three indicators, i.e., Government Effectiveness (GEF), Regulatory Quality (RQ) and Rule of Law (RL) are combined to generate an aggregate national governance indicator which is denoted as *NGI* (National Governance Index) to use in the model and it is as follows:

$$NGI = Government\ Effectiveness + Regulatory\ Quality + Rule\ of\ Law$$

8.3 Background of MFIs in Sri Lanka and India

Table 8.3-1 reports the proportions based on the dataset of 167 MFIs over a period of six years from 2007 to 2012. The most important organisational setting for microfinance activities in Sri Lanka and India is NGO-MFIs, which represent nearly half of the sample. The second largest (34.3%) microfinance providers in these countries are NBFIs, whereas all the other types of institutions are less important as they make up less than 10% of the sample. Even though recent studies (Mersland & Strøm, 2008; Tchakoute-Tchuigoua, 2010) of the microfinance industry reveal that most NGO-MFIs are transforming their institutions to for-profit institutions for better performance, evidence from this study shows that the highest contribution to the sector is still made by the non-profit organisations.

The findings of this study are similar to those of other studies worldwide. Strøm et al. (2014) and Mori and Mersland (2014) highlight that of 379 MFIs in a worldwide sample, 51% are NGOs, 32% are banks and only 16% are co-operatives. Similarly, Hartarska's (2009) study finds that the NGO representation is 52% and NBFIs are 34%. A worldwide MFI sample researched by Mersland and Strøm (2009) find that 28.9% institutions are shareholder-owned firms whereas 58.1% represent non-profit and NGO-MFIs, and the remainder are co-operatives, state banks and other institutions. Nevertheless, Mersland and Strøm (2008) confirm with their findings that the ownership structure does not significantly affect the performance of the MFI which casts doubt on assertions made by Champion and White (1999) and Ledgerwood and White (2006) that MFIs are transforming to for-profit institutions for better performance. The concept of a for-profit charity seems to be a non sequitur and change in the MFI sector might equally be explained as an adverse selection resulting from poor regulatory policy.

Table 8.3-1: Organisation types of MFIs in Sri Lanka and India

Organisation Type	Frequency	Percent
NGO-MFI	420	48.0
NBFC	300	34.3
Company	65	7.4
Co-operative	28	3.2
LSBs	21	2.4
Urban Co-operative Bank	18	2.1
Credit Union	17	1.9
Rural Bank	6	0.7
Total	875	100.0

Note: This table presents the different organisational settings in the microfinance sector in Sri Lanka and India.

Table 8.3-2 illustrates the lending methods applied by MFIs in Sri Lanka and India. Unlike other MFIs in the world, more than half Sri Lankan and Indian MFIs utilise group-based lending methods to provide loans to poor people. The reason for this is that most Indian NGOs and NBFCs are encouraged to provide loans for their clients through the group-based model. However, Galema et al. (2012) find that the individual lending method is the most prominent lending method for around 57% MFIs in their sample of 280, covering 60 countries. In Euro-Mediterranean countries, individual lending methods apply to nearly three-quarters of MFIs (Bassem, 2009). It is evident in this study that only 23% of MFIs prefer individual lending, while 21% of them employ both individual and group-based lending to serve their borrowers. This supports the view that MFIs, in this sample, align with the original microfinance notion of “One for All and All for One” (Khanka, 2010) which is pioneered by the Grameen Bank of Bangladesh. This is the most widely used, well-known practised method of lending in the world. The group-based credit approach utilises the peer-pressure within the group to ensure the repayment of borrowers and allows them to develop a good credit standing.

Table 8.3-2: Lending methods of MFIs in Sri Lanka and India

Lending Methods	Frequency	Percent
Group-based lending	498	56.9
Individual lending	197	22.5
Individual and group-based lending	180	20.6
Total	875	100.0

Note: This table provides the different lending methods applied by the MFIs in Sri Lanka and India.

8.4 Descriptive Data Analysis

Table 8.4-1 provides descriptive statistics of MFIs in Sri Lanka and India for the period 2007 to 2012. This table depicts the mean, median, standard deviation, minimum and maximum values of each variable.

Table 8.4-1 shows, on average, the *OSS* of MFIs in Sri Lanka and India are slightly above the threshold level of one (mean = 1.07 and median = 1.09), suggesting that MFIs in Sri Lanka and India are moderately meeting their obligations while covering their operational costs by generating funds internally. Similarly, a study conducted for 114 MFIs in 62 countries shows 1.08 as the average *OSS* value (Hartarska & Nadolnyak, 2007). However, the minimum and maximum values range between 0.01 and 3.36, indicating that some MFIs are experiencing higher productivity than some of their counterparts.

On average, the *ROA* of the total sample is 0.01 (median = 0.01) with a range of -0.36 to 0.38. Even though the average value of *ROA* is reasonably low, a positive value indicates that MFIs do try to create a value for their investors and donors. This finding is similar to that of a recent study conducted by Strøm et al. (2014) for a world dataset including 30 Indian MFIs and only one Sri Lankan MFI. Strangely, Barry and Tacneng (2014) find 6.51 as their *ROA* which is a comparatively high value for the MFI sector as most of them are non-profit oriented. However, they subsequently adjusted the standard deviation and revealed a new average *ROA* as 1.66.

Table 8.4-1: Descriptive statistics for MFIs in Sri Lanka and India

Variables	Acronyms	Mean	Median	Std. Dev.	Min	Max
Financial Performance Variables						
Operational self-sufficiency	<i>OSS</i>	1.07	1.09	0.37	0.01	3.36
Return on assets	<i>ROA</i>	0.01	0.01	0.08	-0.36	0.38
Yield on gross loan portfolio	<i>YOGLP</i>	0.24	0.22	0.11	0.01	0.95
Operating expenses ratio	<i>OCR</i>	0.12	0.10	0.09	0.01	0.75
Capital asset ratio	<i>CA</i>	0.26	0.19	0.23	-0.77	1
Portfolio at risk more than 30 days	<i>PAR</i>	0.06	0.03	0.09	0	0.58
Outreach Variables						
Number of active borrowers		172027.5	18645	565903.5	25	6242266
Breadth of outreach [LN(Active borrower)]	<i>Breadth</i>	9.81	9.83	2.29	3.22	15.6
Female borrowers to active borrowers (%)	<i>FemBorr</i>	0.9	1	0.17	0.25	1
Depth of outreach (Average loan balance per borrower/GNI per capita)	<i>Depth</i>	0.18	0.14	0.25	0	2.6
Corporate Governance Variables						
Female directors on board (%)	<i>FemDir</i>	0.29	0.25	0.28	0	1
Female CEO	<i>FemCEO</i>	0.19	0	0.39	0	1
Female chairman	<i>FemChair</i>	0.25	0	0.44	0	1
Duality	<i>Duality</i>	0.32	0	0.47	0	1
International directors and donor directors on board (%)	<i>IntDorDir</i>	0.13	0	0.21	0	1
Directors representing clients/borrowers (%)	<i>ClientDir</i>	0.05	0	0.13	0	0.82
Non-executive directors on board (%)	<i>IndDir</i>	0.60	0.63	0.21	0	1
Board size (No. of board members)	<i>Bsize</i>	7.54	7	3.44	1	30
Internal audit function	<i>IntAudit</i>	0.52	1	0.5	0	1
Control Variables						
Regulated by Banking Authority	<i>Regbank</i>	0.39	0	0.49	0	1
Firm age (No. of Years)	<i>Fage</i>	10.4	9	7.6	1	41
Firm size [LN(Total assets)]	<i>Fsize</i>	19.2	19.1	2.2	12.7	25
Leverage	<i>Lev</i>	0.74	0.81	0.24	0	2.04
National governance index	<i>NGI</i>	-0.40	-0.39	0.18	-0.76	-0.05

Note: This table reports the descriptive statistics based on aggregate samples of MFIs in Sri Lanka and India. The variables are defined in Table 4.6-1. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms. For interpretation purposes, number of active borrowers, international directors/donor representatives on board, client representatives on board, board size and firm age are calculated on the basis of levels instead of dummy and logarithmic form. Only firm size is calculated based on logarithmic form.

This study reports 24% (22%) as the average (median) yield on gross loan portfolio (*YOGLP*) for MFIs in Sri Lanka and India. However, a world dataset of 379 MFIs, which includes 31 Indian MFIs and only one Sri Lankan MFI, reports that the average *YOGLP* is 0.33 with a range of -1.46 to 1.22 (Mori & Mersland, 2014). This study shows the minimum and maximum values as 0.11 and 0.95 respectively which is a relatively narrower range than the world statistics.

The average *OCR* of Sub-Sahara African MFIs is 37% (Barry & Tacneng, 2014) which is high compared with this study, with an average (median) 12% (10%). These differences are obvious as they have measured *OCR* relative to the total loans, rather than to total assets. There are some MFIs in Sri Lanka and India which have high levels of operating cost as the maximum value appears 75% in this study. However, Barry and Tacneng (2014) find the maximum value of operating cost is 195%, which is surprisingly high. The minimum value of this study and the findings of Barry and Tacneng (2014) for Sub-Saharan Africa are relatively similar.

The average (median) capital assets ratio (*CA*) of MFIs in Sri Lanka and India is 26% (19%). Remarkably, the maximum and minimum value of *CA* is one and -0.77, which indicates that some MFIs in the sample are making a loss. In a cross-country study, Hartarska and Nadolnyak (2007) find the average capital ratio for MFIs is 48%, with a maximum and minimum of one and -0.98 respectively. A cross country study for 55 countries finds that the banks' average capital asset ratio is 0.12 with a range of -1.17 to 2.96 (Barth, Nolle, Phumiwasana, & Yago, 2003). This underlines that the microfinance sector is much less leveraged as it is very difficult to leverage the risky microfinance loan portfolios (Hartarska & Nadolnyak, 2007, p. 1214).

Of the MFIs studied, the average (median) portfolio at risk more than 30 days (*PAR*) is 6% (3%) and it aligns with global statistics which also includes some Indian and Sri Lankan MFIs (Hartarska, 2009; Strøm et al., 2014; Tchakoute-Tchuigoua, 2010). The maximum for this financial performance variable is 58% with a minimum of zero. This maximum value is less than the world figures which range between 80%-90%. On average, the credit portfolio of MFIs in Sri Lanka and India are healthy and less risky in recovering their loans. Possible explanations may related to the

number of client visits, loan collection frequencies due to the income earning ability of clients and tide monitoring contributing to lower *PAR*.

On average, 172,028 active customers are reached in this sample while the maximum number of active customers is more than 6.2 million. A study conducted for Tanzania and Kenya shows that the average number of customers is approximately 72,000 (Mori & Olomi, 2012). Another global study shows that the average number of customers reached is nearly 15,000 with a minimum and maximum of 24 and 513,000 respectively (Mori & Mersland, 2014). This helps to illustrate that the *Breadth* of outreach to the people in Sri Lanka and India is significantly greater than for other countries and may be attributed to their experience in the market. Moreover, the log transformation of mean and the median values of active borrowers (*Breadth*) are 9.81 and 9.83 respectively.

This study reveals that MFIs in Sri Lanka and India have a gender bias, as 90% of their loan clients are females (*FemBorr*), which is higher when compared to Cull et al. (2009) who find female representation of MFIs, on average, is only 75% of total clients. However, their study indicates that for more than half of the NGOs in the sample, at least 85% of their clients are female. Mersland and Strøm (2009) find that MFIs around the world have 73% female customers. Another study conducted for Sub-Saharan Africa states that their women borrowers are around 60% ranging from zero to 100%. Although the maximum proportion of female clients is comparable with prior studies, the minimum value (25%) is not. This supports the view that the unique feature of microfinance is to give priority to female clients and place strong focus on women borrowers for institutional development. There are some MFIs in both Sri Lanka and India operating micro-credit programme with only female clients.

The average (median) *Depth* of outreach in this study is 0.18 (0.14) which is very low value when compared with the value obtained by Barry and Tacneng (2014) for Sub-Saharan Africa from 2001 to 2007, with a mean of 1.26 and range of 0.02 and 41.21. However, the current study has a minimum value of zero and maximum is 2.6. Outreach to people of lower income is greater in MFIs in South Asia than those reached globally.

Female leadership of MFIs in Sri Lanka and India is also presented in Table 8.4-1. Higgs (2003) points out that even though around 30% of the managers in the UK corporate sector are female, women hold fewer than 1% of chairperson positions. Conversely, in this study, on average, 29% (median = 25%) of the board seats are held by women (*FemDir*) in which 25% of them have a female chairperson (*FemChair*). It also reports that 19% of MFIs have a female as CEO (*FemCEO*). A study representing 47 MFIs (23 in Kenya and 24 in Tanzania) also finds that 29% of board members are women (Mori & Olomi, 2012). According to Mersland and Strøm (2009), 23% of MFIs around the world have a woman in the CEO position. A sample consisting of MFIs from regions around the world³⁸ reveal that female representation on MFI boards is 30% (Chakrabarty & Bass, 2014). Furthermore, Strøm et al. (2014) report that in their sample 27% of MFIs have female CEOs, 23% of them have a female chairperson and 29% of board members are women.

Interestingly, the CEO/chair duality (*Duality*) average is 32% in this study. It is double the value obtained by Strøm et al. (2014) in terms of CEO/chair duality for a world dataset which includes only one Sri Lankan and 30 Indian MFIs. Kyereboah-Coleman (2006) and Kyereboah-Coleman and Osei (2008) find that 50% of MFIs in Ghana have the same person in CEO and chairperson roles.

On average, 13% of board members, as shown in Table 8.4-1, are international and/or donor agency representatives (*IntDorDir*). This indicates that the boards of directors are mostly represented by local directors. The median value of 50% of MFIs not having any international/donor representatives on their board is consistent with the 13% representation. Donor representation on MFI boards appears at 9% for MFIs in a world dataset (Mersland & Strøm, 2009; Mori & Mersland, 2014). Furthermore, they reveal that only 5% of board members represent both donor and creditor. Galema et al. (2012) find from a sample of 280 MFIs from 60 countries that 56% of board members are international which is a relatively greater representation than Sri Lanka and India.

³⁸ Eastern Europe and Central Asia, East Asia and the Pacific, Africa, South Asia, Latin America and the Caribbean, and the Middle East and North Africa.

On average, 5% of board members are representatives of clients (*ClientDir*) and 50% of MFIs in Sri Lanka and India do not have at least one person as a client representative. Client representation on MFI boards for a global dataset is 18% whereas clients and employees representation on the board is only 7% (Mori & Mersland, 2014). Another global study finds customer representation on the board is 11% (Mersland & Strøm, 2009) but MFIs of Central and Eastern Europe and Newly Independent States have only 4% (Hartarska, 2005). This low level of client representation is suggested by Luoma and Goodstein (1999) as acceptable because stakeholders' representation tends to increase with the growth of the industry, but this does not appear to have been achieved.

Sri Lankan and Indian MFIs have 60% (median = 63%) non-executive directors (*IndDir*) on their boards which complies with the code of corporate governance requirements for both countries. In the event of the CEO and chairman being the same person, the board should comprise a majority of non-executive directors. In this study, 32% of the MFIs have the same person for both CEO and chairman roles and the majority of their board members are non-executive directors (mean = 58%). It is however interesting to indicate that the lowest and the highest outside representatives on the boards of MFIs in Sri Lanka and India are 0% and 100% respectively. A study conducted for 52 selected MFIs in Ghana for the period 1995-2004 reports that only 48% of board members are outsiders (Kyereboah-Coleman & Osei, 2008) and another study held for Tanzania and Kenya reports 38% (Mori & Olomi, 2012), which is relatively lower compared with South Asian MFIs.

The average number of board members (*Bsize*) in MFIs in Sri Lanka and India is 8 (median is 7) in this study which is on par with international experience of board size (Hartarska & Nadolnyak, 2007; Mersland & Strøm, 2009; Strøm et al., 2014). Mori and Mersland (2014) find that world MFI boards range between 2 to 23 members with an average of 7 board members. However, Jensen (1993) recommends that the corporate boards with more than seven or eight members are less effective monitors.

On average, 52% of MFIs in the sample have internal audit function (*IntAudit*) which is relatively high compared to world statistics of 39% (Strøm et al., 2014). However, they collected internal audit data for one time period based on

assessments completed by a rating agency, applying these same figures throughout the research period. Similar results for Euro-Mediterranean countries reveal half of the MFIs have direct internal audit reporting to the board (Bassem, 2009), which is compatible with Mersland and Strøm (2009). Remarkably, more than half of the MFIs in Sri Lanka and India consider on internal audit function as an important internal governance element.

In Sri Lanka and India, on average, 39% of MFIs are regulated by the banking authority (*Regbank*). Mori and Mersland (2014) state that only 27% of MFIs in a world dataset are regulated by central bank authorities. Also a cross-country dataset of 114 MFIs (including 19 Indian MFIs) finds 68% of MFIs are regulated (Hartarska & Nadolnyak, 2007). However, the proportions of regulated MFIs differ between countries due to the structure of regulation and differences in regulatory philosophy.

The mean age for MFIs in Ghana is 13 years (Kyereboah-Coleman & Osei, 2008) whereas the mean age of MFIs in 59 countries (including India) is approximately 15 years (Chakrabarty & Bass, 2014). Similar to global findings reported by Mori and Mersland (2014) and Strøm et al. (2014), the MFIs in Sri Lanka and India are younger with a mean age (*Fage*) of 10 (median = 9) years which may contribute to why most MFIs in the sample have less diversification in their loan portfolios.

Firm size (*Fsize*) is measured as the log of total assets. The mean (median) log value of the total assets is 19.2 (19.1) with minimum of 12.7 and maximum of 25 (See Table 8.4-1). Comparatively similar results are observed in global studies (Chakrabarty & Bass, 2014; Hartarska & Nadolnyak, 2007; Mori & Mersland, 2014).

As presented in Table 8.4-1, the mean (median) leverage of the Sri Lankan and Indian MFI sample (*Lev*) is 0.74 (0.81) with values between zero and 2.04 which shows negative net assets for MFIs with a value greater than 1.

National governance index (*NGI*) shows an average (median) value of -0.4 (-0.39) with a minimum of -0.76 and range of 0.71. This highlights that the national governance quality of Sri Lanka and India is moderately weak as all the values are negative.

8.5 Pair-wise Correlation

Table 8.5-1 provides the information on pair-wise correlation coefficients of MFIs in Sri Lanka and India. The correlation coefficients among financial performance, outreach, corporate governance and control variables show that the selected variables are interacting. This provides an indication for further investigation of these variables using a multiple linear regression. This approach does have weaknesses but is used as, on balance, it provides some insights into the relationships which might otherwise have been overlooked.

Table 8.5-1: Correlation matrix for variables

	OSS	ROA	YOGLP	OCR	CA	PAR	Breadth
OSS	1						
ROA	0.400***	1					
YOGLP	0.112***	0.119***	1				
OCR	-0.420***	-0.147***	0.459***	1			
CA	0.026	-0.007	-0.078**	0.128***	1		
PAR	-0.148***	-0.078**	0.073**	0.093***	-0.076**	1	
Breadth	0.246***	0.011	-0.042	-0.341***	-0.197***	-0.131***	1
FemBorr	0.047	0.001	0.007	0.015	0.015	-0.194***	0.192***
Depth	0.080**	-0.014	-0.130***	-0.390***	-0.068**	0.006	0.002
FemDir	-0.070**	0.044	0.065*	0.112***	-0.102***	0.276***	-0.396***
FemCEO	-0.057*	0.007	-0.016	0.047	-0.067**	0.216***	-0.230***
FemChair	0.009	0.044	-0.052	-0.026	-0.037	0.138***	-0.164***
Duality	-0.007	0.057*	0.064*	0.059*	-0.013	0.017	0.095***
IntDorDir	0.085**	-0.029	-0.058*	-0.193***	-0.042	-0.088***	0.396***
ClientDir	0.065*	0.123***	-0.055	-0.151***	-0.060*	0.004	-0.140***
IndDir	-0.061*	0.018	0.016	0.011	-0.105***	0.048	-0.004
Bsize	0.098***	0.071**	-0.038	-0.217***	-0.163***	0.125***	0.081**
IntAudit	0.077**	-0.040	-0.049	-0.143***	0.011	-0.143***	0.468***
Regbank	0.050	-0.075**	-0.028	-0.148***	0.068**	-0.150***	0.568***
Fage	0.072**	0.109***	0.049	-0.110***	-0.118***	0.344***	0.060*
Fsize	0.211***	-0.000	-0.039	-0.383***	-0.178***	-0.043	0.924***
Lev	-0.029	0.003	0.078**	-0.125***	-0.999***	0.078**	0.198***
NGI	0.020	-0.000	-0.152***	-0.144***	-0.034	-0.058*	-0.057*

	FemBorr	Depth	FemDir	FemCEO	FemChair	Duality	IntDorDir
FemBorr	1						
Depth	-0.266***	1					
FemDir	-0.016	0.031	1				
FemCEO	-0.052	0.181***	0.496***	1			
FemChair	-0.003	0.086**	0.522***	0.534***	1		
Duality	0.003	0.069**	-0.030	0.173***	0.035	1	
IntDorDir	0.131***	0.137***	-0.154***	-0.018	-0.025	0.080**	1
ClientDir	0.001	0.159***	0.292***	0.268***	0.283***	0.102***	0.065*
IndDir	-0.122***	0.028	0.017	0.102***	0.099***	-0.056	0.176***
Bsize	0.057*	0.084**	0.312***	0.145***	0.222***	-0.121***	0.145***
IntAudit	0.106***	0.040	-0.272***	-0.131***	-0.065*	0.103***	0.282***
Regbank	0.098***	0.092***	-0.309***	-0.096***	-0.126***	0.130***	0.321***
Fage	-0.104***	-0.004	0.316***	0.120***	0.241***	0.023	0.014
Fsize	0.060*	0.239***	-0.312***	-0.139***	-0.107***	0.099***	0.365***
Lev	-0.017	0.066**	0.102***	0.066*	0.036	0.015	0.043
NGI	-0.086**	0.095***	0.015	0.019	-0.002	-0.075**	-0.020

	ClientDir	IndDir	Bsize	IntAudit	Regbank	Fage	Fsize	Lev	NGI
ClientDir	1								
IndDir	-0.024	1							
Bsize	0.277***	0.282***	1						
IntAudit	-0.101***	0.006	0.035	1					
Regbank	-0.206***	-0.044	-0.076**	0.499***	1				
Fage	0.101***	0.147***	0.412***	-0.003	-0.137***	1			
Fsize	-0.116***	0.058*	0.156***	0.454***	0.552***	0.132***	1		
Lev	0.058*	0.105***	0.162***	-0.010	-0.066*	0.119***	0.179***	1	
NGI	0.024	0.021	-0.028	-0.121***	-0.057*	-0.137***	-0.081**	0.034	1

Note: This table reports the pair-wise correlation coefficients among the variables. *, **, and *** denote statistical significance at 10%, 5%, and 1% levels, respectively. The notations are defined in Table 4.6-1.

As reported in Table 8.5-1, most independent variables are statistically significantly correlated with the dependent variables. This offers a basic insight into the proposition that independent variables have an association with MFI performance. Notably, the national governance variables (*NGI*) are statistically significantly correlated with most of MFI performance variables which support the well-

documented proposition that country-specific variables do matter for MFI performance.

It is also evident from Table 8.5-1 that none of the correlation coefficients among independent variables included in the regression model exceed the threshold value of 0.80 (Gujarati & Porter, 2004, p. 359), triggering a concern over the likely presence of multicollinearity. All correlation coefficients among independent variables are less than 0.60.

Table 8.5-2: Multicollinearity diagnostic tests

Variable	VIF
FemDir	2.04
FemCEO	1.67
FemChair	1.67
Duality	1.13
IntDorDir	1.28
ClientDir	1.29
IndDir	1.18
Bsize	1.57
IntAudit	1.48
Regbank	1.87
Fage	1.41
Fsize	1.98
Lev	1.11
NGI	1.04

Note: This table reports the VIF coefficients for explanatory variables. The notations are defined in Table 4.6-1.

A more robustness approach to investigating the possibility of multicollinearity among the independent variables is the use of VIF values. As presented in Table 8.5-2, none of the VIF values exceed 2.04 in the regressors. It is commonly accepted that when the value of VIF is 10 or above, these are usually considered to

be good indications of the presence of a collinearity problem among independent variables (Chatterjee & Hadi, 2012; Myers, 1990). This points to multicollinearity not being a problem for multiple regression analysis.

There is a concern in the microfinance context (Morduch, 1999) regarding the trade-off between financial performance and outreach. Microfinance is a social business and it has a social mission to offer financial services to poor people while being financially sustainable. However, in this study, the correlations between financial performance and outreach are less than 0.40 indicating there is weak correlation between two dependent variables and the goals are independent.

8.6 Multiple Regression Analysis for Financial Performance

8.6.1 Selection of regression model

Table 8.6-1 illuminates the Hausman test results which are used to select either fixed-effect or random-effect estimation models. The Hausman results suggest fixed-effect estimation procedures are appropriate for OSS ($Chi\text{-}sq(14)=25.04; p=0.03$), YOGLP ($Chi\text{-}sq(14)=55.87; p=0.00$), OCR ($Chi\text{-}sq(14)=46.49; p=0.00$) and PAR ($Chi\text{-}sq(14)=25.71; p=0.03$) as p -values are significantly lower than the 5% level. The Hausman test results suggest using the random-effect estimation procedures for ROA ($Chi\text{-}sq(14)=20.13; p=0.13$) and CA ($Chi\text{-}sq(14)=18.01; p=0.16$).

Table 8.6-1: Selection of fixed or random effect models

Dependent Variables	Prob>chi2	Hausman Test Result
OSS	0.034	Fixed-effect Model
ROA	0.126	Random-effect Model
YOGLP	0.000	Fixed-effect Model
OCR	0.000	Fixed-effect Model
CA	0.157	Random-effect Model
PAR	0.028	Fixed-effect Model

Note: This table presents the Hausman test results for financial performance variables. The notations are defined in Table 4.6-1.

The Breusch and Pagan LM test for random effects is applied as a robustness check for the use of the random-effect model for *ROA* and *CA* dependent variables. The test result ($Prob > \chi^2 = 0.00$) suggests that the pooled regression model is not appropriate for *ROA* and *CA* dependent variables due to the rejection of null hypothesis at 5% significance level. As a result, the alternative hypothesis is accepted and recommended it is appropriate to use random-effect model.

8.6.2 Empirical results for financial performance

Table 8.6-2 depicts the empirical results of the multiple regression analysis after controlling for unobserved heterogeneity in the panel data model. Even though the sign of coefficients are as expected, few corporate governance variables are statistically significant in relation to financial performance of MFIs.

Findings of this study reveal that international and/or donor agency representatives on MFI boards (*IntDorDir*) are associated with higher ($t=1.69, p=0.10$) operational self-sufficiency (*OSS*). This indicates that when an international director or a representative of a donor agency sits on an MFI board, they are in a position to effectively monitor the operation of MFIs. They are able to provide more resources by way of consultancy service, IT support, funding requirements to expand the operation, which all help to sustain the MFIs in India and Sri Lanka, adding more resources at less cost or no cost. However, Hartarska (2005) suggests that the boards with a higher proportion of donor representatives have poor financial performance when measured by *ROA*. Contrary to Hartarska (2005), Hartarska and Mersland (2009) but similar to Mori and Mersland (2014), this study shows that donor representatives are beneficial for MFIs. Oxelheim and Randøy (2003) also find that the presence of foreign directors on corporate boards improves firm performance.

Table 8.6-2: The relationship between corporate governance and financial performance of MFIs in Sri Lanka and India

Variables	OSS		ROA		YOGLP		OCR		CA		PAR	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	B/(p)	[t]
FemDir	-0.065 (0.566)	[-0.575]	-0.011 (0.447)	[-0.761]	-0.110 (0.274)	[-1.097]	-0.244 (0.162)	[-1.405]	-0.068 (0.101)	[-1.642]	-0.009 (0.717)	[-0.363]
FemCEO	0.034 (0.551)	[0.598]	0.005 (0.564)	[0.578]	-0.050 (0.327)	[-0.984]	0.010 (0.869)	[0.166]	-0.015 (0.448)	[-0.759]	0.009 (0.351)	[0.935]
FemChair	0.004 (0.926)	[0.092]	0.007 (0.307)	[1.021]	0.014 (0.693)	[0.395]	-0.008 (0.880)	[-0.151]	0.015 (0.407)	[0.828]	0.001 (0.953)	[0.060]
Duality	-0.021 (0.569)	[-0.570]	0.004 (0.470)	[0.722]	0.039 (0.418)	[0.813]	-0.002 (0.973)	[-0.033]	0.007 (0.691)	[0.398]	0.009 (0.358)	[0.922]
IntDorDir	0.105* (0.092)	[1.694]	-0.003 (0.640)	[-0.468]	0.048 (0.383)	[0.874]	-0.031 (0.586)	[-0.545]	-0.003 (0.868)	[-0.166]	-0.011 (0.412)	[-0.823]
ClientDir	0.006 (0.922)	[0.098]	0.021*** (0.004)	[2.884]	0.032 (0.584)	[0.548]	0.077 (0.254)	[1.145]	0.006 (0.776)	[0.284]	-0.013 (0.346)	[-0.945]
IndDir	-0.182 (0.201)	[-1.284]	-0.014 (0.356)	[-0.924]	0.062 (0.668)	[0.429]	0.116 (0.513)	[0.656]	0.018 (0.704)	[0.381]	-0.002 (0.967)	[-0.041]
Bsize	0.104 (0.111)	[1.602]	0.006 (0.446)	[0.763]	-0.038 (0.625)	[-0.490]	-0.119 (0.121)	[-1.558]	-0.016 (0.486)	[-0.697]	-0.014 (0.397)	[-0.849]
IntAudit	0.065 (0.131)	[1.519]	-0.000 (1.000)	[-0.000]	0.057 (0.169)	[1.382]	-0.021 (0.692)	[-0.397]	-0.008 (0.576)	[-0.559]	0.000 (0.982)	[0.023]
NGI	0.564*** (0.000)	[3.810]	0.029 (0.140)	[1.475]	-0.170 (0.122)	[-1.553]	-0.897*** (0.000)	[-5.151]	-0.072 (0.120)	[-1.554]	-0.057* (0.054)	[-1.939]
Regbank	0.002 (0.986)	[0.018]	-0.036 (0.198)	[-1.289]	0.184 (0.110)	[1.609]	0.246 (0.254)	[1.145]	0.146 (0.215)	[1.241]	-0.005 (0.729)	[-0.348]

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Fage	0.078 (0.224)	[1.221]	0.013*** (0.002)	[3.168]	0.272*** (0.000)	[4.135]	0.231*** (0.009)	[2.659]	-0.029** (0.034)	[-2.124]	-0.008 (0.412)	[-0.823]
Fsize	0.092*** (0.001)	[3.496]	0.004* (0.084)	[1.729]	-0.050 (0.112)	[-1.598]	-0.245*** (0.000)	[-5.798]	-0.052*** (0.000)	[-8.376]	-0.004 (0.263)	[-1.123]
Lev	-0.271** (0.011)	[-2.563]	-0.024** (0.036)	[-2.093]	0.040 (0.702)	[0.384]	0.162 (0.346)	[0.945]			0.011 (0.407)	[0.831]
Constant	-0.626 (0.173)	[-1.368]	-0.066* (0.066)	[-1.838]	-1.310** (0.017)	[-2.414]	1.592** (0.039)	[2.078]	1.246*** (0.000)	[10.963]	0.153*** (0.005)	[2.861]
year dummies	yes		yes		yes		yes		yes		yes	
organisation type dummies	no		yes		no		no		no		no	
firm fixed-effects	yes		no		yes		yes		no		yes	
Number of observations	858		858		859		867		860		868	
R-squared	0.114		0.082		0.175		0.191		0.160		0.052	
F statistic	2.672***				4.708***		6.214***				1.571*	
Wald Chi-squared statistic			50.38***						132.11***			
Number of clusters	167				167		166				167	

Note: This table presents the results of the relationship between corporate governance and financial performance of MFIs in Sri Lanka and India. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). *p*-Values are presented in parentheses and based on robustness standard errors corrected for potential heteroskedasticity and serial correlation in the error term. *t*-Statistics are reported in brackets. The notations are defined in Table 4.6-1. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms. Year dummy 2007 and organisation type dummy company are treated as the benchmark categories to avoid any dummy variable trap. Year dummies and organisation type dummies are unreported.

Stakeholder representation on the board is beneficial for MFIs (Mori & Mersland, 2014). Similarly, Mori and Mersland (2014) and Hartarska (2005) note statistically significant positive ($t=2.88, p=0.01$) association with financial performance (*ROA*) for the presence of client representatives on MFI boards (*CleintDir*). This supports the contention that client representatives on MFI boards do not prevent MFIs from being profitable. The presence of stakeholders on MFI boards in Sri Lanka and India appear to bring a significant positive impact for financial performance.

It is evident that country-level variables are significant in prior MFI governance-performance relationship studies (Bassem, 2009; Hartarska, 2005). According to the results in Table 8.6-2, the national governance quality does matter for financial performance of MFIs in Sri Lanka and India with the coefficient for *NGI* variable being statistically significant. *NGI* has a statistically significant positive association with the *OSS* ($t=3.81, p=0.01$) and a negative association with the *OCR* ($t=-5.15, p=0.01$). This indicates that the higher quality of national governance indicators improves the sustainability of MFIs in Sri Lanka and India through the provision of proper rules and regulations. Similarly, it helps MFIs to reduce their operating cost because appropriate rules and regulations support MFIs to maintain low levels of operational expenses. *NGI* has a statistically significant and enviably negative ($t=-1.94, p=0.10$) relationship with *PAR*. This result supports the connection that quality of government rules and regulations and sound policy implications in Sri Lanka and India are very important for MFIs to improve their portfolio quality.

This study finds no statistically significant evidence for the relationship between MFI financial performance and female directors, female CEOs, female chair, duality, independent directors, board size and internal audit function. The estimated coefficients on these variables are not statistically significant even at 10% significance level. A study based on 240 YMCA organisations also finds that gender diversity on the board does not have a significant impact on performance while reporting a negative relationship (Siciliano, 1996). Similarly, Hartarska (2005) does not find reliable evidence that board size and audits matter in terms of the sustainability of MFIs. Contrary to the findings of Hartarska (2005), this study finds that independent directors on the board do not improve the performance.

Similarly, financial performance proxies such as portfolio yield and capital-to-asset do not have any significant relationship with corporate governance variables used in this study.

8.7 Multiple Regression Analysis for Outreach

8.7.1 Selection of regression model

The model formulation was examined using the Hausman test to determine choice of either a fixed- or random-effect model as reported in Table 8.7-1. The test result suggests that it is preferable to employ a fixed-effect estimation procedure for *Breadth* ($Chi-sq(14)=32.09; p=0.00$) variable due to the rejection of the null hypotheses as p -values are statistically significantly lower than the 0.05 level. The Hausman test results also suggests that the random-effect estimation procedures are valid for *FemBorr* ($Chi-sq(14)=22.40; p=0.07$) and *Depth* ($Chi-sq(14)=18.98; p=0.17$) variables based on failure to reject the null hypothesis.

Table 8.7-1: Selection of fixed or random effect model

Dependent Variables	Prob>chi2	Hausman Test Result
Breadth	0.0039	Fixed-effect Model
FemBorr	0.0707	Random-effect Model
Depth	0.1656	Random-effect Model

Note: This table presents the Hausman test results for outreach variables. The notations are defined in Table 4.6-1.

The Breusch and Pagan LM test for random effects is used as a robustness check to determine the choice of the random-effect estimation procedures for *FemBorr* and *Depth* dependent variables is suitable. The test results ($Prob > \chi^2 = 0.00$) suggest that the null hypothesis of pooled regression model is not appropriate for *FemBorr* and *Depth* dependent variables as it is rejected at 5% significance level. The alternative hypothesis of random-effect model is accepted and can be used as an appropriate model to represent the data.

Table 8.7-2: The relationship between corporate governance and outreach of MFIs in Sri Lanka and India

Variables	Breadth		FemBorr		Depth	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]
FemDir	-0.077 (0.652)	[-0.452]	0.046* (0.054)	[1.930]	0.023 (0.251)	[1.149]
FemCEO	-0.066 (0.625)	[-0.490]	-0.004 (0.703)	[-0.382]	0.026** (0.019)	[2.341]
FemChair	0.196* (0.054)	[1.944]	-0.015 (0.141)	[-1.473]	-0.018* (0.065)	[-1.847]
Duality	0.011 (0.879)	[0.152]	-0.004 (0.657)	[-0.445]	-0.007 (0.424)	[-0.799]
IntDorDir	0.182* (0.094)	[1.685]	0.030*** (0.003)	[2.941]	-0.014 (0.110)	[-1.600]
ClientDir	-0.156** (0.031)	[-2.176]	0.004 (0.730)	[0.345]	0.015 (0.134)	[1.498]
IndDir	-0.085 (0.707)	[-0.377]	-0.055** (0.037)	[-2.083]	0.020 (0.367)	[0.903]
Bsize	-0.212* (0.094)	[-1.686]	0.006 (0.657)	[0.444]	0.006 (0.588)	[0.542]
IntAudit	0.085 (0.243)	[1.173]	0.004 (0.644)	[0.462]	0.002 (0.770)	[0.292]
NGI	-0.293 (0.199)	[-1.290]	0.035 (0.165)	[1.388]	0.004 (0.873)	[0.160]
Regbank	0.072 (0.252)	[1.150]	-0.120 (0.112)	[-1.591]	0.135*** (0.004)	[2.871]
Fage	0.245*** (0.007)	[2.744]	-0.016** (0.049)	[-1.966]	-0.015** (0.019)	[-2.349]
Fsize	0.817*** (0.000)	[15.050]	0.007* (0.077)	[1.769]	0.014*** (0.000)	[4.589]
Lev	0.347** (0.049)	[1.987]	0.002 (0.925)	[0.094]	-0.038** (0.015)	[-2.443]
Constant	-6.146*** (0.000)	[-5.725]	0.797*** (0.000)	[12.113]	-0.059 (0.272)	[-1.099]
Year dummies	yes		yes		yes	
Organisation- type dummies	no		yes		yes	
Firm fixed-effects	yes		No		no	
Number of observations	859		865		865	
R-squared	0.695		0.083		0.121	
F statistic	59.631***					
Wald Chi-squared statistic			145.70***		149.34***	
Number of clusters	166					

Note: This table presents the results of the relationship between corporate governance and outreach of MFIs in Sri Lanka and India. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). *p*-Values are presented in parentheses and are based on robustness standard errors corrected for potential heteroskedasticity and serial correlation in the error term. *t*-Statistics are reported in brackets. The notations are defined in Table 4.6-1. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPFA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms. Year dummy 2007 and organisation type dummy company are treated as the benchmark categories to avoid dummy variable trap. Year dummies and organisation type dummies are unreported.

8.7.2 Empirical results for outreach

Table 8.7-2 reports the multiple regression results using *Breadth*, *FemBorr* and *Depth* as dependent variables as proxies for outreach. The results show that the MFI outreach in Sri Lanka and India is affected by certain corporate governance mechanisms mentioned in the literature.

There is a weak indication, not statistically significant, that female directors on boards (*FemDir*) increase the *Breadth* of outreach (number of borrowers) whereas a statistically significantly positive association ($t=1.93$, $p=0.10$) is indicated for proportion of female borrowers (*FemBorr*). Comparatively, Siciliano (1996) highlights that YMCA organisations with increased gender diversity provide high levels of social performance. It appears that female board members in Sri Lankan and Indian MFIs are supportive to female clients who are creditworthy, providing significant amount of loans to few female clients.

Consistent with Mersland and Strøm (2009), this study does not find a statistically significant relationship between female CEO (*FemCEO*) and number of credit clients (*Breadth*) in MFIs in Sri Lanka and India. However, this study finds that the female CEO (*FemCEO*) is statistically significantly positively ($t=2.34$, $p=0.05$) correlated with *Depth* of outreach proxy which means if the CEO is a female then the MFI is not as socially efficient than when the CEO is a male. This is consistent with the view that female-led MFIs in Sri Lanka and India are willing to lend money to people who are not poor and creditworthy, which appears to indicate that MFIs are drifting away from their mission (Morduch, 1999).

Female chairperson (*FemChair*) is positively ($t=1.94$, $p=0.10$) correlated with number of active borrowers (*Breadth*) and negatively ($t=-1.85$, $p=0.10$) correlated with *Depth*. This suggests that women chairpersons' increase the number of clients in Sri Lankan and Indian MFIs and there is support for the notion they disburse credit to poorer borrowers. The poorer the borrowers, the greater the depth of outreach. Communities benefit from MFI operations gain higher value from the given microfinance loans (Navajas et al., 2000; Quayes, 2012).

This study finds that international directors and/or donor representatives (*IntDorDir*) on boards are associated with a higher ($t=1.69$, $p=0.10$) number of clients (*Breadth*)

and higher ($t=2.94$, $p=0.01$) proportion of female borrowers (*FemBorr*), and therefore better outreach. Mori and Mersland (2014) also find that breadth of outreach can increase with more donor representatives on MFI boards. Hartarska (2005) finds similar results in relation to depth of outreach. Most international representatives or donor agents have a social mission of helping the helpless (poor and low income) people. When international directors and/or donors representatives are on MFI boards, they apply their full competencies toward that mission (Mori & Mersland, 2014).

Findings of this study relating to client representatives on the board (*ClientDir*) are interesting but not surprising. Client representative directors have a positive impact on MFI performance and they do not improve outreach. The directors who represent the clients on board are statistically significantly negatively ($t=-2.18$, $p=0.05$) related to the number of active borrowers (*Breadth*) of MFIs in Sri Lanka and India. It is suggested that client representatives on the board have greater interest in borrowers who are less poor (Hartarska, 2005). Mori and Mersland (2014) comment that customers who serve on boards may monopolise the services for a few people.

A larger proportion of non-executive directors (*IndDir*) on the board has a statistically significant negative ($t=-2.08$, $p=0.05$) effect on the proportion of female borrowers (*FemBorr*) and this is contrary with evidence reported in Ghana (Kyereboah-Coleman & Osei, 2008), Euro-Mediterranean countries (Bassem, 2009) and Central and Eastern Europe and the Newly Independent States (Hartarska, 2005). Potentially, executive directors understand the MFI operations better than the non-executive directors. Employee directors have insight information about the organisation and take necessary action to improve MFI outreach.

This study shows a statistically significant negative ($t=-1.68$, $p=0.10$) relationship between board size (*Bsize*) and *Breath* of outreach. Several other studies record a negative relationship between board size and performance (Adams & Ferreira, 2009; Yermack, 1996). Mersland and Strøm (2009) confirm a negative relationship between board size and average loan size of MFIs in a world dataset. One possible explanation for this outcome is that firms lose their mission on outreach due to longer decision-making time in larger boards. Most MFI boards in the sample of

this study are found to be larger than conventional boards and may suffer from free-rider problems. This has been highlighted by Hartarska and Mersland (2009).

This study shows that the national governance quality does not matter for outreach of MFIs in Sri Lanka and India. Even though *NGIs* have a statistically significant impact on MFI financial performance, there is no significant impact for outreach. Similar results are shown by Hartarska (2009) and Mersland and Strøm (2009). However, Hartarska and Mersland (2009, p. 236) comment that the lack of environmental influence for MFI activities may support the argument that microfinance is less influenced by the macroeconomic environment, culminating in similar findings as this study.

Other corporate governance variables such as *Duality* and *IntAudit* are observed as having an insignificant relationship with outreach variables. Similarly, Hartarska (2005) does not find reliable evidence that audit affects the outreach of MFIs in Central and Eastern Europe and the Newly Independent States.

8.8 Dynamic Panel Generalised Method of Moments (GMM) Estimator

There are many empirical studies examining the relationship between corporate governance and firm performance. Most findings confirm an association between corporate governance and various measures of firm performance. More recently it has been argued that the findings are affected by potential sources of endogeneity (Love, 2011; Marinova et al., 2010; Schultz et al., 2010) and provide biased parameter estimators. In governance-performance studies there is a lack of consensus on the nature of endogeneity. This is because it is difficult to identify the exogenous factors in a governance structure (Wintoki et al., 2012).

Corporate governance research does identify two main sources of potential endogeneity: unobserved heterogeneity across companies and simultaneity. Wintoki et al. (2012) suggest that all board structure variables are considered to be endogenously determined. Strøm et al. (2014) highlight that female leadership variables may be endogenously determined and have to be taken into account. Furthermore, Adams and Ferreira (2009) state that the percentage of female

directors on the board must be treated as an endogenous variable; male CEOs, who have less interest in firm growth may attract more female directors to their boards (Goergen & Renneboog, 2014). There is an endogeneity issue for the board independency variable, as better firms are more likely to adopt more independent boards (Claessens & Yurtoglu, 2012). Board size also tends to vary based on firm size and firm complexity (Boone et al., 2007).

To overcome the issue of endogenous regressors, it is necessary to incorporate an instrument (z) that associates only with the explanatory variable and not with the error term. However, it is extremely difficult to identify reliable external instruments for governance variables (Flannery & Hankins, 2013) and this is especially so for microfinance studies. Given the difficulty, this study follows the method suggested by Schultz et al. (2010) that “selected lags have the desirable instrumental variable properties of being correlated to the regressors, yet uncorrelated with contemporaneous errors” (p. 149).

Another source of endogeneity identified in governance studies may arise as a result of past firm performance. This implies the relationship between corporate governance and firm performance is dynamic by nature depending on its own past realisation (Roodman, 2009a). According to Wintoki et al. (2012, p. 585);

“board structure is a choice variable that arises through a process of bargaining between the various actors in a firm’s nexus of contracts, where the bargaining process is influenced by past performance and the actors’ beliefs about the costs and benefits of particular board structures”.

This study looks at the possible link between corporate governance and MFI performance. One-year lagged dependent variables are added as explanatory variables in the right hand side of the research model to capture the unobserved factors that interact with the link between corporate governance variables and performance variables (Strøm et al., 2014). Even though Wintoki et al. (2012) propose two lags of the dependent variable to capture the dynamic nature of governance-performance relationship, this study finds that a one-year lag is sufficient as coefficients for a two-year lag are not statistically significant at 5%

level. This is in line with the studies of Nguyen et al. (2014) and Adams and Ferreira (2009).

Therefore, as a robustness test, this study applies the well-developed system generalised method of moments (System GMM) estimator approach to control the endogeneity issue inherent in the relationship between corporate governance and performance. This is the most appropriate estimation method which provides valid instruments to explore the dynamic nature of corporate governance (Flannery & Hankins, 2013; Roodman, 2009b). Therefore, the model is used in the analysis of Sections 8.8.1 and 0 is as follows:

Performance = f (past performance, board structure, firm characteristics, fixed effects, error term)

8.8.1 Empirical results for financial performance using system GMM

The impact of corporate governance on MFI financial performance based on GMM analysis is reported in Table 8.8-1. The discussion covers those corporate governance variables that are statistically significantly linked with MFI financial performance when the dynamic nature of the relationship is taken into consideration.

As shown in Table 8.8-1, this study finds that the financial performance of MFIs in Sri Lanka and India is quite persistent; past financial performance strongly explains the variation in current performance. This highlights that the inclusion of one-year lagged financial performance variables as explanatory variables are important to control the dynamic endogeneity. It is in line with the proposition suggested by Wintoki et al. (2012) with the coefficients on *LagOSS* ($t=4.15, p=0.01$), *LagROA* ($t=4.30, p=0.01$), *LagYOGLP* ($t=4.75, p=0.01$), *LagOCR* ($t=6.07, p=0.01$), *LagCA* ($t=5.31, p=0.01$) and *LagPAR* ($t=6.15, p=0.01$) having a statistically significant positive influence on *OSS*, *ROA*, *YOGLP*, *OCR*, *CA* and *PAR*.

While controlling for the endogeneity effect, this study shows a strong negative ($t=-2.16, p=0.05$) relationship between women's representation in MFI boardrooms (*FemDir*) and MFI performance with reference to *OSS*. Similarly, it reveals an undesirable positive ($t=1.93, p=0.10$) relationship between *FemDir* and *PAR*. Matsa and Miller (2013) state that the reason for negative performance is that more

female representation on the board decreases the short-run profits by having fewer employee layoffs and higher relative employment, which results in an increase in labour cost. They further state that women are generally altruistic and long-term oriented than men and like to retain staff as a more profitable long-term strategy and a solution to worker's fear of unemployment risk. Adams and Ferreira (2009) also find similar negative results after controlling for endogeneity for US firms where they are over-monitored by female directors. This highlights the view that ineffectiveness of gender balances in MFIs leads to less concern for enterprise profit. The results from the fixed-effect model have a negative sign for the relationship between *FemDir* and MFI financial performance but are not statistically significant. This suggests the need to conduct further research to explore the impact of female board directors and MFI performance.

Client representation on MFI boards (*ClientDir*) is found to be significantly positively ($t=1.95$, $p=0.10$) correlated with MFI return on assets (*ROA*). This highlights that the result for the relationship between client representative on board and financial performance of MFIs in Sri Lanka and India is robustness in an alternative approach. The findings also agree with the predictions of agency theory, stakeholder theory, resource dependency theory, institutional theory and legitimacy theory as discussed in Chapter 3. It is consistent with Mori and Mersland (2014) and Hartarska (2005), who suggest that stakeholder representation does matter.

It is evident that non-executive directors (*IndDir*) are statistically significantly negatively ($t=-1.90$, $p=0.10$) correlated with the *OSS* of MFIs in Sri Lanka and India, differing from the impact in the fixed-effect estimation procedure. It should be noted that board independency is not a statistically significant variable for MFI performance once the time-invariant unobserved heterogeneity across MFIs is controlled, but still the relationship is negative. Nowland (2008) also confirms a negative relationship between board independence and firm performance from a study of 221 companies in the seven East Asian nations of Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan and Thailand. The reason for this negative impact may be the lack of knowledge and experience of the appointed non-executive directors in terms of the microfinance sector.

The size of MFI boards (*Bsize*) is found to be statistically significantly negatively ($t=-2.19, p=0.05$) associated with MFI operating expenses (*OCR*). It suggests that larger boards with many advocates tend to reduce the excessive administrative cost of MFIs in Sri Lanka and India, which ultimately leads to better performance. The relationship between *Bsize* and *PAR* is also statistically significant and desirably negative ($t=-2.36, p=0.05$). It is evident that the larger boards provide greater monitoring and expertise services to reduce the risk prevailing in the microfinance portfolio. This supports the propositions of resource dependency theory that suggest a positive relationship (Dalton et al., 1999). However, the results are not statistically significant under fixed-effect estimation procedure, but still the relationship is negative. The volunteering component of board members can reduce cost and could be a topic of further research.

With regard to the internal audit function (*IntAudit*) variable, the system GMM model provides evidence of a statistically significant and negative ($t=-1.95, p=0.10$) relationship with *ROA*. This is contrary to the results obtained by Mersland and Strøm (2009) who suggest that the board improves MFI performance through internal auditors by directly reporting to the board or sub-committees. An inference from the findings of this study is that the internal audit activities in MFIs in Sri Lanka and India may impose additional cost to the organisation which outweigh financial returns to the institution. Once the time-invariant unobserved heterogeneity across MFIs is controlled, the result is negative but not statistically significant.

Table 8.8-1: The relationship between corporate governance and financial performance of MFIs: Evidence from the aggregate sample of Sri Lanka and India

	OSS		ROA		YOGLP		OCR		CA		PAR	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]
LagOSS	0.414***	[4.149]										
	(0.000)											
LagROA			0.317***	[4.304]								
			(0.000)									
LagYOGLP					0.325***	[4.752]						
					(0.000)							
LagOCR							0.514***	[6.065]				
							(0.000)					
LagCA									0.449***	[5.307]		
									(0.000)			
LagPAR											0.478***	[6.152]
											(0.000)	
FemDir	-0.315**	[-2.161]	0.032	[1.214]	-0.191	[-0.989]	0.013	[0.066]	-0.112	[-1.488]	0.051*	[1.931]
	(0.032)		(0.226)		(0.324)		(0.947)		(0.139)		(0.055)	
FemCEO	0.088	[1.431]	0.008	[0.829]	0.018	[0.249]	-0.037	[-0.501]	-0.005	[-0.162]	0.021	[1.555]
	(0.154)		(0.408)		(0.804)		(0.617)		(0.871)		(0.122)	
FemChair	-0.006	[-0.119]	0.003	[0.355]	-0.047	[-0.795]	0.025	[0.337]	-0.002	[-0.074]	0.001	[0.112]
	(0.905)		(0.723)		(0.428)		(0.737)		(0.941)		(0.911)	
Duality	-0.061	[-1.291]	0.008	[0.656]	0.092	[1.560]	0.038	[0.456]	0.041	[1.383]	0.004	[0.550]
	(0.199)		(0.513)		(0.121)		(0.649)		(0.168)		(0.583)	
IntDorDir	0.085	[1.141]	0.000	[0.001]	0.016	[0.267]	-0.067	[-0.738]	-0.022	[-0.808]	-0.013	[-1.058]
	(0.255)		(0.999)		(0.790)		(0.462)		(0.420)		(0.291)	
ClientDir	-0.030	[-0.410]	0.030*	[1.947]	-0.084	[-0.916]	-0.027	[-0.292]	0.017	[0.664]	-0.009	[-0.513]

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	(0.682)		(0.053)		(0.361)		(0.770)		(0.508)		(0.609)	
IndDir	-0.308*	[-1.904]	-0.019	[-0.668]	0.286	[1.541]	0.245	[1.291]	0.079	[1.033]	0.056	[1.507]
	(0.059)		(0.505)		(0.125)		(0.199)		(0.303)		(0.134)	
Bsize	0.120	[1.583]	0.010	[0.770]	-0.070	[-0.597]	-0.263**	[-2.187]	-0.011	[-0.283]	-0.038**	[-2.355]
	(0.115)		(0.443)		(0.551)		(0.030)		(0.778)		(0.020)	
IntAudit	-0.031	[-0.560]	-0.019*	[-1.952]	-0.012	[-0.190]	0.003	[0.040]	-0.017	[-0.654]	0.018	[1.611]
	(0.576)		(0.053)		(0.850)		(0.968)		(0.514)		(0.109)	
NGI	0.329***	[2.803]	0.031	[1.266]	-0.082	[-0.739]	-0.403**	[-2.496]	-0.005	[-0.109]	-0.034*	[-1.670]
	(0.006)		(0.207)		(0.461)		(0.014)		(0.913)		(0.097)	
Regbank	0.001	[0.011]	0.017	[1.103]	-0.059	[-0.695]	-0.130	[-0.976]	-0.000	[-0.008]	-0.036***	[-2.709]
	(0.992)		(0.272)		(0.488)		(0.331)		(0.994)		(0.007)	
Fage	0.010	[0.408]	-0.004	[-0.778]	-0.024	[-0.612]	-0.038	[-0.840]	0.017	[0.782]	0.012**	[2.379]
	(0.684)		(0.438)		(0.542)		(0.402)		(0.435)		(0.019)	
Fsize	0.011	[0.703]	0.003	[0.911]	-0.021	[-1.105]	-0.053**	[-2.136]	-0.020*	[-1.962]	0.006*	[1.745]
	(0.483)		(0.364)		(0.271)		(0.034)		(0.051)		(0.083)	
Lev	-0.281**	[-1.976]	-0.071**	[-2.086]	0.283**	[2.094]	0.291	[1.596]			-0.017	[-1.088]
	(0.050)		(0.039)		(0.038)		(0.112)				(0.278)	
Constant	0.877***	[2.848]	0.011	[0.151]	-0.739*	[-1.935]	-0.069	[-0.147]	0.482**	[2.411]	-0.083	[-1.619]
	(0.005)		(0.880)		(0.055)		(0.883)		(0.017)		(0.107)	
Number of observations	697		708		697		708		698		701	
F statistic	7.09		4.33		7.71		13.51		7.14		15.67	
Number of instruments	184		184		184		184		171		184	
Hansen-J test of over-identification (<i>p</i> -value)	0.80		0.85		0.75		0.80		0.76		0.74	

Note: This table presents the robustness results of the relationship between corporate governance and financial performance of MFIs in Sri Lanka and India though the use of system GMM model. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***) levels. *p*-Values are presented in parentheses and based on robustness standard errors. *t*-Statistics are reported in brackets. Hansen-J test of over-identification test is used to check the validity of the system GMM estimator and it suggests that the IVs used in the model are valid due to the inability of rejecting the null hypothesis as all the *p*-values are > 0.05 significant level. The notations are defined in Table 4.6-1. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPFA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms. Year dummies are unreported.

After controlling potential sources of endogeneity, the findings of national governance quality (*NGI*) in this study are consistent with findings reported under the fixed-effect model. It can determine that the impact of national governance indicators on MFI performance is strong under different econometric approaches. *NGI* is statistically significantly positively associated with the *OSS* ($t=2.80, p=0.01$) and significantly negatively associated with the *OCR* ($t=-2.50, p=0.05$). Similarly, *NGI* correlate negatively ($t=-1.67, p=0.10$) with *PAR*. These highlight the importance of the quality of government rules, regulations and sound policy for the microfinance sector in Sri Lanka and India. Consistent with propositions of prior studies (Bassem, 2009; Hartarska, 2005), it advocates that the country-level governance practices are significant for the MFI financial performance.

8.8.2 Empirical results for outreach using system GMM

Table 8.8-2 reports the impact of corporate governance on MFI outreach after controlling for potential sources of endogeneity.

The dynamic nature of outreach variables are captured by using lagged performance variables as explanatory variables in the model. As shown in Table 8.8-2, the past outreach performance of MFIs in Sri Lanka and India significantly explains the variation in current performance. It is consistent with Wintoki et al. (2012), who illustrate the importance of using past performance to control the dynamic nature of the association between corporate governance and performance. The coefficients of *LagBreadth* ($\beta = 0.392$), *LagFemBorr* ($\beta = 0.801$) and *LagDepth* ($\beta = 0.337$) are positively associated with *Breadth*, *FemBorr* and *Depth* respectively at the 1% significance level.

Results may vary with the estimation method as Adams and Ferreira (2009) find different results with the estimation methods they used, such as OLS, fixed effects at industry- and firm-level methods, and a two-stage least squares IV method. This study does not find statistically significant evidence of women's leadership impacting MFI outreach after taking into account the concerns of simultaneity and dynamic endogeneity.

Once the dynamic nature of the governance-performance relationship is controlled by using the system GMM estimation procedure, the results show a statistically significant and positive ($t=2.95$, $p=0.01$) relationship between *IntDorDir* and *Breadth* of outreach of MFIs in Sri Lanka and India. This is consistent with results obtained from the fixed-effect model, suggesting that the findings are robustness. Mori and Mersland (2014) and Hartarska (2005) find similar results for other regions. It suggests that the presence of international and/or donor agency representatives on MFI boards reflect a higher concern for the microfinance social mission. This enables them to reach as many clients as possible who need microfinance services to sustain their lives.

Non-executive directors (*IndDir*) are statistically significantly negatively ($t=-2.99$, $p=0.01$) associated with *Breadth* of outreach of MFIs in Sri Lanka and India. The results of the system GMM model indicate that the presence of non-executive directors on MFI board leads to lower social performance. Non-executive directors encourage MFIs to disburse great amount of loans to fewer borrowers, considering their repayment ability. It may be that non-executive directors in Sri Lankan and Indian MFIs lack knowledge about the social impact of microfinance activities. Further research may be able to explore the background and goals of independent directors of MFIs. Under the fixed-effect estimation procedure, results show a negative relationship between *IndDir* and *Breadth* of outreach but the results are not statistically significant.

Even though the national governance index does not show a significant effect on *Breadth* of outreach results obtained from the fixed-effect estimation producer, the dynamic model show a statistically significantly positive ($t=2.03$, $p=0.05$) association between *NGI* and number of clients (*Breadth*) in MFIs in Sri Lanka and India. It suggests that government policies, rules and regulations do matter for MFIs to achieve better outreach when the concerns of simultaneity and dynamic endogeneity are taken into account.

Table 8.8-2: The relationship between corporate governance and outreach of MFIs: Evidence from the aggregate sample of Sri Lanka and India

	Breadth		FemBorr		Depth	
	b/(p)	[t]	b/(p)	[t]	b/(p)	[t]
LagBreadth	0.392*** (0.000)	[5.639]				
LagFemBorr			0.801*** (0.000)	[8.816]		
LagDepth					0.337*** (0.000)	[4.424]
FemDir	-0.363 (0.226)	[-1.216]	0.027 (0.596)	[0.532]	0.024 (0.307)	[1.025]
FemCEO	-0.174 (0.164)	[-1.399]	0.001 (0.978)	[0.028]	0.037 (0.342)	[0.952]
FemChair	-0.034 (0.761)	[-0.304]	-0.027 (0.370)	[-0.898]	-0.013 (0.602)	[-0.522]
Duality	-0.130 (0.195)	[-1.300]	0.010 (0.612)	[0.508]	0.007 (0.657)	[0.445]
IntDorDir	0.395*** (0.004)	[2.950]	0.027 (0.558)	[0.587]	-0.004 (0.812)	[-0.238]
ClientDir	-0.111 (0.413)	[-0.822]	-0.001 (0.978)	[-0.028]	0.011 (0.283)	[1.077]
IndDir	-1.034*** (0.003)	[-2.985]	-0.020 (0.766)	[-0.299]	0.043 (0.218)	[1.237]
Bsize	0.135 (0.377)	[0.885]	0.027 (0.353)	[0.931]	-0.002 (0.872)	[-0.162]
IntAudit	-0.052 (0.542)	[-0.610]	0.013 (0.562)	[0.581]	-0.006 (0.542)	[-0.612]
NGI	0.440** (0.044)	[2.028]	-0.001 (0.987)	[-0.016]	-0.020 (0.243)	[-1.172]
Regbank	0.695*** (0.000)	[4.118]	0.003 (0.889)	[0.140]	-0.013 (0.566)	[-0.576]
Fage	-0.080 (0.255)	[-1.141]	-0.011 (0.465)	[-0.732]	-0.006 (0.475)	[-0.716]
Fsize	0.482*** (0.000)	[7.416]	-0.002 (0.858)	[-0.179]	0.020*** (0.000)	[4.501]
Lev	0.385 (0.123)	[1.549]	-0.014 (0.616)	[-0.502]	-0.021 (0.240)	[-1.179]
Constant	-2.936*** (0.001)	[-3.481]	0.191 (0.459)	[0.743]	0.321*** (0.000)	[-4.110]
Number of observations	694		703		700	
F statistic	173.15		420.72		19.12	
Number of instruments	184		184		184	
Hansen-J test of over-identification (<i>p</i> -value)	0.81		0.84		0.81	

Note: This table presents the robustness results of the relationship between corporate governance and outreach of MFIs in Sri Lanka and India through the use of system GMM model. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***) levels. *p*-Values are presented in parentheses and based on robustness standard errors. *t*-Statistics are reported in brackets. Hansen-J test of over-identification test is used to check the validity of the system GMM estimator and it suggests that the IVs used in the model are valid due to the inability of rejecting the null hypothesis as all the *p*-values are > 0.05 significant level. The notations are defined in Table 4.6-1. For Sri Lanka, raw data are downloaded from the MIX market database and/or extracted from LMFPFA, and/or downloaded from the websites of individual firms, including annual reports and/or by contacting individual firms. For India, the data are directly downloaded from the MIX market database and/or extracted from the websites of individual firms, including annual reports and/or by contacting individual firms. Year dummies are unreported.

8.9 Conclusion

This chapter examines how corporate governance mechanisms affect performance of MFIs in Sri Lanka and India. Inconsistent findings in prior studies and a general lack of empirical results for the microfinance industry have led to leaving an unclear message regarding corporate governance and MFI performance.

In this chapter, the national governance indicators in Sri Lanka and India are considered along with background information of MFIs in these countries. Analysis using fixed-effect and random-effect estimation procedures are presented. The dynamic panel GMM estimation procedure, which is robustness to dynamic endogeneity, simultaneity and unobserved heterogeneity, is discussed.

It is evident from the results that not all known governance mechanisms in for-profit companies affect the performance of MFIs in Sri Lanka and India. Furthermore, different corporate governance mechanisms have various effects on financial performance and outreach, consistent with the views of Hartarska (2005), Bassem (2009) and Mori and Mersland (2014). An important finding of this study is that the corporate governance practices of MFIs in Sri Lanka and India are impacted by regulatory framework.

As proponents of agency theory and resource dependency theory suggest, a diversified board provides more monitoring and resources, which ultimately increases firm performance, and this study also illustrates the importance of board diversity on MFI performance. The study finds that stakeholders such as international directors, donor agency representatives and client representatives on boards are important as they can exert various influences on MFIs' performance. Specifically, the international directors and/or donor representatives on MFI boards are associated with better financial performance and outreach. Once the dynamic nature of the governance-performance relationship is controlled, this study shows a significant relationship between international/donor representation on board and outreach. This is expected as Yermack (1996) states that monitoring is strict among donors and they may actively participate in MFI movements. They have a unique intention of helping the helpless people in developing counties by providing resources and funds. More international/donor representatives on MFI boards are

likely to enhance monitoring and, importantly, help to find solutions for the lack of resources from which MFIs suffer.

Consistent with Mori and Mersland (2014) and Hartarska (2005), this study shows that client representatives are associated with better financial performance but low outreach. Client representatives on MFI boards show a significant relationship with financial performance even after the endogeneity effect is controlled. Hartarska (2005) states that the client representatives on MFI boards can facilitate better sustainability at the expense of depth of outreach. This lower outreach needs to be addressed by future research to see what extent these representative hinder outreach. Also, the advocates for client inclusion on MFI boards should be aware of this adverse behaviour regarding outreach and consider the need for education and induction programmes.

This study finds that the impact of female leadership on MFI performance is inconsistent and insignificant in different estimations. While controlling for potential sources of endogeneity, this study shows that female directors on boards are associated with lower financial performance. These findings may be idiosyncratic to the specific sample or region. Studies in other regions have shown that diversified boards are desirable for MFI performance. Therefore, it is important to conduct further investigation into how to integrate women on boards in a manner that increases outreach to the poor: well-qualified female directors have unique characteristics to create additional value (García-Meca et al., 2015).

This study finds that the proportion of non-executive directors achieves less outreach to female clients. After controlling for the endogeneity effect, results show that the proportion of non-executive directors on MFI boards is linked with lower financial performance and outreach. This may be due to the non-executive directors' lack of knowledge and experience about microfinance activities as they are not engaged thoroughly in day-to-day operations as executive directors are. Therefore, it is important to provide better orientation and professional development initiatives for non-executive directors, or recruit people who have prior experience about the sector.

It is suggested from the findings that national governance quality matters for MFIs' financial performance as *NGIs* are statistically significantly positively correlated with *OSS* and negatively correlated with *OCR* and *PAR*. It is shown that *NGIs* play a critical role in the financial performance of MFIs. However, outreach proxies show an insignificant correlation to *NGI* under fixed- and random-effect estimation models. Nevertheless, when the dynamic nature of the relationship between governance and performance is considered, the *NGIs* are significantly associated with the number of clients in MFIs in Sri Lanka and India. This finding indicates that MFI outreach is linked not only to localised events but also to the national governance system. This is acceptable as most government rules and regulations are formed for economic development of a country and the economic well-being of its people, which can be associated with the microfinance activities of the country. Duality and internal audit function does not show any statistically significant association with financial and outreach performance measures. These mechanisms have a limited role in the microfinance sector.

In order to check the robustness of the findings, this chapter re-examines the corporate governance and MFI performance nexus of Sri Lanka and India by controlling the dynamic nature of the relationship as recommended by Wintoki et al. (2012) and others. Accordingly, this study confirms that the MFIs' contemporaneous performance and corporate governance characteristics are statistically significantly positively linked with their past performance. Interestingly, contrary to the findings of Wintoki et al. (2012), among others, this study finds that the statistically significant effect of the presence of international directors and/or donor representatives on the board, client representatives on the board, percentage of non-executive directors and the quality of the national governance system on MFI performance remain valid even after controlling for dynamic endogeneity, unobserved heterogeneity and simultaneity. It suggests that the findings are robustness to an alternative econometric approach.

Evidence suggests that MFIs in Sri Lanka and India have significant room to achieve sustainable operations and competence in reaching low income clients. However, they should make more effort to improve their performance. It is important for MFIs to incorporate more governance to move forward in the sector.

Both governments should enact microfinance regulations to maintain a competitive and constructive market for the microfinance suppliers. Finally, it can be concluded that corporate governance does matter for the microfinance sector, but the governance mechanisms seen as important for the corporate sector do not necessarily impact in the same way for MFIs in developing economies.

CHAPTER NINE

SUMMARY AND CONCLUSION

9.1 Introduction

This chapter summarises the findings regarding the relationship between corporate governance practices, financial performance and outreach in MFIs in Sri Lanka and India. Section 9.2 describes the focus of the study. Section 9.3 explains the empirical results for the hypotheses tested in the study. Section 9.4 highlights the significance contribution to knowledge and how this adds to the existing body of literature, and a discussion of policy implications follows in section 9.5. Limitations of the study and possible suggestions for future directions are noted in section 9.6 and concluding comments are presented in section 9.7.

9.2 Focus of the Study

Microfinance is a form of financial credit with roots that have a primary aim to alleviate poverty (Barr, 2004, p. 273). The aim is not achievable if the industry remains poor, lacks resources and uses the scarce funds available inefficiently. The microfinance industry faces challenges in two ways due to its dual objectives of how to reach more low-income people and how to attain sustainability. Advocates of the microfinance industry argue that MFIs need to be sustained to have long-term impacts for low-income people. In order to secure the future of the microfinance sector, it is important for MFIs to be sustainable financially while focusing on social goals. In other words, financial performance and outreach must be achieved concurrently. This has been highlighted by Cull et al. (2007).

Labie and Mersland (2011) state that tremendous growth in service providers, a wide range of organisation types, different stakeholder involvement with their competing interests, liability management and international recognition all contribute to why corporate governance is an important area for research in the microfinance sector. Corporate governance is likely to assure the long-term survival

of an institution without losing track of its social mission. Similarly, having a good corporate governance structure in an MFI will contribute to a sound financial system and economic development of a community. Well-governed MFIs may contribute significantly to a country's economic and social well-being.

Corporate governance in the microfinance sector does not appear to be mature and a large proportion of literature in this area consists of consultancy reports and guidelines on how to structure boards and their procedures. Many recommendations in corporate governance practices for the microfinance sector are copied from those developed to aid for-profit firms in mature markets, with limited empirical supports to indicate applicability to MFIs (Lapie & Mersland, 2011).

There are emerging studies commenting on the link between corporate governance and performance. The application of normative assertions, while potentially easy to prepare, may lack significant consideration of multiple confounding values relating to the context, structure, history, system, personnel and more components of the jigsaw that makes for the performance of an MFI. Empirical work to date does not reflect consensus and this suggests a need for further empirical research, using micro-econometric techniques, such as regression analyses of panel data, to support the conceptual literature currently available.

This study identifies corporate governance mechanisms that influence the financial performance and outreach of MFIs. First, this thesis provides an examination of the impact of corporate governance practices on financial performance and outreach of MFIs in Sri Lanka. Second, this study describes the impact of corporate governance practices, financial performance and outreach of MFIs in India. Corporate governance variables considered are derived from the corporate governance theories, principally agency theory, and empirical findings of prior studies. These variables contribute to an understanding of effects on financial performance and outreach of MFIs in Sri Lanka and India. Third, the differences between corporate governance practices and performance of MFIs in Sri Lanka and India are noted, especially in line with national-level governance quality which appears to influence corporate governance and performance of MFIs. Finally, this study examines the impact of corporate governance, financial performance and outreach of MFIs based on an aggregate sample of firms in Sri Lanka and India. The research expands the

understanding of corporate governance practices of MFIs and the impact of those practices on financial performance and outreach in two emerging countries in the South Asian region. It is now known with a greater level of certainty that corporate governance variables such as board diversity, board size and internal controls do matter for MFI performance. It is also clearer that many conventional wisdoms, such as more female directors relate with better financial performance and adverse impact of duality, do not hold.

The data required to test the various hypotheses are sourced from MIX market, LMFPFA in Sri Lanka and Sa-Dhan, the microfinance network in India. Board of directors and outreach data are collected for each individual institution through its annual report, individual firm website and by personally contacting the individual MFI. The sample period is 2007 to 2012 for both countries, containing 54 MFIs for Sri Lanka and 113 MFIs for India. Panel data analysis techniques and various diagnostic tests are used to investigate the hypotheses and to check the validity of the models in the study.

9.3 Summary of Empirical Results

Table 9.3-1 presents a summary of hypotheses tested in relation to corporate governance, financial performance and outreach of MFIs in Sri Lanka, India and both the aggregate sample of Sri Lanka and India and how the findings are different from prior findings.

The findings of this investigation into the relationship between established internal corporate governance practices and financial performance and outreach in MFIs present challenges for practitioners and regulators. Among the traditional corporate governance mechanisms applied in for-profit sector of mature markets, this study finds few variables that influence the financial performance and outreach of MFIs in Sri Lanka and India. Only a few variables are significantly associated with MFI performance which in itself is interesting. These results are predominantly consistent with those reported in prior studies relating to corporate governance and MFI performance. The results are robustness with respect to controls for legal status, MFI age, size, leverage and type.

Table 9.3-1: Summary of hypotheses results regarding corporate governance variables, financial performance and outreach of MFIs in Sri Lanka, India and both countries

Variables	Financial Performance						Outreach					
	Sri Lanka		India		Both		Sri Lanka		India		Both	
	Hypotheses	Different results	Hypotheses	Different results	Hypotheses	Different results	Hypotheses	Different results	Hypotheses	Different results	Hypotheses	Different results
<i>FemDir</i>	Reject H1 _a	Positive (Strøm et al., 2014)	Reject H1 _a	Positive (Strøm et al., 2014)	Reject H1 _a	Positive (Strøm et al., 2014)	Reject H1 _b	Positive (Hartarska, 2005)	Accept H1 _b		Reject H1 _b	Positive (Hartarska, 2005)
<i>FemCEO</i>	Accept H2 _a		Reject H2 _a	Positive (Mersland & Strøm, 2009)	Reject H2 _a	Positive (Mersland & Strøm, 2009)	Reject H2 _b		Reject H2 _b		Reject H2 _b	
<i>FemChair</i>	Accept H3 _a		Reject H3 _a	Positive (Strøm et al., 2014)	Reject H3 _a	Positive (Strøm et al., 2014)	Reject H3 _b		Accept H3 _b		Reject H3 _b	
<i>Duality</i>	Reject H4 _a	Negative (Kyereboah-Coleman & Osei, 2008)	Reject H4 _a	Negative (Kyereboah-Coleman & Osei, 2008)	Reject H4 _a	Negative (Kyereboah-Coleman & Osei, 2008)	Reject H4 _b		Reject H4 _b		Reject H4 _b	
<i>IntDorDir</i>	Reject H5 _a	Positive (Mori & Mersland, 2014)	Accept H5 _a	Negative (Hartarska, 2005; Mersland & Strøm, 2009)	Reject H5 _a	Positive (Mori & Mersland, 2014)	Accept H5 _b		Accept H5 _b		Accept H5 _b	
<i>ClientDir</i>	Accept H6 _a		Accept H6 _a		Accept H6 _a		Reject H6 _b		Reject H6 _b		Reject H6 _b	
<i>IndDir</i>	Reject H7 _a	Positive (Hartarska, 2005; Kyereboah-Coleman & Osei, 2008)	Accept H7 _a		Reject H7 _a	Positive (Hartarska, 2005; Kyereboah-Coleman & Osei, 2008)	Reject H7 _b	Positive (Hartarska, 2005; Kyereboah-Coleman & Osei, 2008)	Reject H7 _b	Positive (Hartarska, 2005; Kyereboah-Coleman & Osei, 2008)	Reject H7 _b	Positive (Hartarska, 2005; Kyereboah-Coleman & Osei, 2008)
<i>BSize</i>	Accept H8 _a	Negative (Hartarska, 2005)	Reject H8 _a	Positive (Kyereboah-Coleman & Osei, 2008)	Accept H8 _a	Negative (Hartarska, 2005)	Reject H8 _b	Positive (Hartarska, 2005)	Reject H8 _b	Positive (Hartarska, 2005)	Reject H8 _b	Positive (Hartarska, 2005)
<i>IntAudit</i>	Accept H9 _a		Accept H9 _a		Reject H9 _a	Positive (Mersland & Strøm, 2009)	Reject H9 _b		Reject H9 _b		Reject H9 _b	

A potentially controversial finding suggests that financial performance of MFIs in both countries can improve if there are fewer female directors on their boards. Econometrically, this finding still holds even after controlling for dynamic endogeneity, simultaneity and unobserved time-invariant heterogeneity inherent in the governance-performance relationship. A positive relationship is experienced by Strøm et al. (2014) in a global panel, covering 1998-2008. This may result from cultural differences in these countries compared to other countries where a positive effect is observed. An earlier study for Sri Lankan companies noted it is a male-dominated society, women are traditionally subordinate to men and have a silent and inactive role on the board (Hewa-Wellalage & Locke, 2013). If this is to be accepted as a plausible stance, then there is a need for director induction, support and ongoing training programmes which change the attitudes of and towards women. In the absence of the widespread use of 180 and 360 degree reviews of directors, there is a need for further investigation into how to integrate women on boards in a manner that adds value.

It is found that the female representation on Indian MFI board improves outreach to low-income people whereas Sri Lankan data provides inconclusive evidence on outreach impact. Hartarska (2005) finds better outreach with the presence of more female directors on MFI boards by using a random-effect estimation approach. Female CEO is found to be significantly positively related only with financial performance of MFIs in Sri Lanka and significantly negatively associated with outreach of MFIs in India. A global study conducted by Mersland and Strøm (2009) for the period 2000-2007 reports financial performance improves with a female CEO, but no impact for outreach. When the chairperson of an MFI board is female financial performance is improved in Sri Lanka, but not in Indian MFIs. Female chairperson provides significant positive effect for outreach of MFIs in India but finds inconclusive evidence for effect on outreach of MFIs in Sri Lanka. However, Strøm et al. (2014) find that when an MFI has a female chair it performs better in financially. In these two emerging countries, emoluments of an MFI director and top management are quite low compared with the corporate sector. As a result, it may be that these positions are not so actively sought by highly qualified women. MFIs can seek skilful women on their boards or offer training opportunities through their links, such as funding agencies, MFI networks, various associations and

channels. When more talented women are ascended in the boards and top management positions, gender difference in microfinance sector may diminish (Adams & Ferreira, 2009). It is important for shareholders and advocates to select the right women for the correct positions; women who match with their preferences and business objectives.

Findings suggest that CEO/chair duality do not have a detrimental effect on MFI performance (both financial and outreach) except in circumstances where operating costs increase due to duality in Sri Lanka. A study conducted in Ghana for 1995-2004 shows that duality has a negative impact on MFI financial performance (Kyereboah-Coleman & Osei, 2008). Therefore, corporate governance theories and recent guidelines for firms to separate the CEO and chairman roles need to be re-considered with due care and may require to be tailored to the context of MFIs, because “one size does not fit all” (Hewa-Wellalage et al., 2012). Kiel and Nicholson (2003, p. 202) highlight that the issue of CEO duality may be contingent on a company’s size and challenges. However, transforming from duality to non-duality may not increase the performance of MFIs, but may reduce the fraud risk.

The findings indicate that more international representation and donor participation on MFI boards in both countries make a viable contribution to better outreach. Even though prior studies find inconclusive evidence regarding the relationship between international and/or donor representation on MFI boards and outreach (Hartarska, 2005; Mersland & Strøm, 2009; Mori & Mersland, 2014) it can be stated that the findings of this study are robustness and not driven by potential source of endogeneity (Nguyen et al., 2014). To achieve better outreach, the governments of both countries could either suggest or promulgate regulation to bring MFIs into line with the requirement of establishing more international and donor agency monitoring on the board. As far as financial performance is concerned, based in the context of Indian MFIs, this study finds that international and donor representatives have a desirable impact for the financial performance of MFIs but a significantly negative impact on MFIs in Sri Lanka.

Other stakeholders, such as client representatives on the board, improve financial performance of MFIs in both countries. This finding still holds even after controlling for dynamic endogeneity, simultaneity and unobserved time-invariant

heterogeneity inherent in the governance – performance relationship. But in the context of Sri Lanka, this kind of financial sustainability is achieved at the expense of client outreach (Hartarska, 2005). Therefore, when recommending policies or guidelines for the MFI sector in Sri Lanka, it is noteworthy for advocates of the sector to be aware of this adverse impact of client representatives on the board.

Even though outside directors provide inconclusive evidence for financial performance of MFIs in Sri Lanka, this variable shows a significant positive effect on financial performance of MFIs in India and a significant negative relationship for the aggregated sample after controlling the possible sources of endogeneity. However, this study could not find any significant relationship between outside directors and outreach of MFIs in individual country studies, but finds a negative relationship for the combined sample. Prior MFI studies which use a random-effect estimation procedure find that MFIs can perform better when they have more independent boards. Following Nowland (2008), this study supports the view that outside directors have less influence on MFI activities. This is echoing the need to take more care when selecting suitable directors who have more knowledge about the sector.

Size of the board has a significant negative effect on outreach of MFIs in India but no effect on MFIs in Sri Lanka. In contrast, a higher number of members on an MFI board improves the financial sustainability of MFIs in Sri Lanka but not in India. Prior studies find inconclusive evidence for board size on financial performance (Hartarska, 2005; Kyereboah-Coleman & Osei, 2008) but positive impact on outreach by using a random-effect estimation method (Hartarska, 2005). The aggregated sample shows better financial performance for larger boards after controlling for dynamic endogeneity, simultaneity and unobserved time-invariant heterogeneity inherent in the governance – performance relationship. Findings point to the fact that the larger board is more sustainable for MFIs. This is because larger boards provide better monitoring, greater linkage to external resources and are harder for CEOs to control (Adams & Mehran, 2003; Coles et al., 2008).

Finally, the results show that the impact of internal audit function on MFIs in India is inconclusive with regard to outreach, and therefore it is difficult to make inferences. This study does not find any significant impact of internal audit function

on outreach of MFIs in Sri Lanka. However, both countries find that the internal audit function improves financial performance. The findings are consistent with the propositions made by Sinclair (2012) and Mersland and Strøm (2009). The plausible reason could be that the focus of internal controls is more towards the financial substance of the firm rather than the non-financial measures such as outreach. However, in the dynamic modelling framework, the internal audit function relates with low financial performance.

9.4 Significance Contribution to Knowledge and Literature

This study makes a number of significant contributions to the literature relating to corporate governance, financial performance and outreach, and the relationship between them.

The application of normative assertions about the relationship between corporate governance, financial performance and outreach of MFIs is dangerous due to lack consideration of values relating to the individual countries. For example, conventional corporate governance guidelines have recommended to increase female representation on boards to achieve better performance, which is not proved in the microfinance sector in the South Asian region.

Prior studies yield conflicting and ambiguous results due to the different methodological approaches. Econometric estimations derived from the simple OLS regression are changed with the use of fixed- and random-estimation approaches because these approaches control the unobserved heterogeneity across the firms. Once the potential sources of dynamic endogeneity is controlled, the econometric estimations for inference of corporate governance – performance relationship are changed. Therefore, it is necessary to have an appropriate method to examine the nexus between corporate governance and MFI performance.

First, this study makes an advanced contribution to the international literature by understanding the corporate governance practices of MFIs in Sri Lanka and India separately and comprehensively in a combined dataset. Evidence shows that understanding of good corporate governance practices in relation to MFIs is still not well-developed. The international differences in corporate governance and

performance in the microfinance sector seem to be an understudied area. Worldwide studies that observed the relationship between corporate governance and performance provide narrow implications for a single country (Black et al., 2014) because only one or a few institutions represent a country in the entire world sample. The application of corporate governance in the microfinance sector with many firm-year observations provides deep and comprehensive understanding, which add value to this research. This study may assist the international donors, funding agencies, investors and advocates to identify MFIs that are performing well, both financially and non-financially. Furthermore, the results of this study are appropriate both for individual MFIs and government policy makers as they indicate that firms can perform better when they comply with good corporate governance practices and “invisible hands” in the industry can direct MFIs to improve their corporate governance.

Second, this study uses a wider range of corporate governance, financial performance and outreach variables than prior studies, which enhances the understanding of the relationship between different corporate governance variables and MFI performance. Little consideration was previously given to mapping outcomes with the MFI mission, measuring impact and evaluating processes for enhanced outreach. This governance structure mechanism enables MFIs to conduct their operations with special reference to social performance by approaching low income people who require economic development for their lives. By using both financial performance and outreach data, this research makes a significant contribution to the extant literature on how corporate governance directs MFIs to achieve their dual mission and be sustainable.

Third, this thesis extends the knowledge of corporate governance theories from the for-profit sector to MFIs. Theories mainly generated through for-profit organisations in mature markets represent, to some extent, the corporate governance relationship in other sectors. This study is based on agency theory, but to a lesser extent includes elements of stewardship theory, stakeholder theory, institutional theory, legitimacy theory and resource dependency theory. Empirical investigations on how corporate governance practices may enhance financial performance and outreach in the microfinance sector, with special consideration given to the sectorial differences, are reported.

Fourth, studies of corporate governance and its relationship with firm behaviour are popular in mature markets. Only limited research exists relating to the corporate governance practices in emerging economies, especially relating to developing countries. No studies have been conducted in South Asian countries until now to identify corporate governance mechanisms that are important for performance of MFIs in the region. There are studies relating to the effects of corporate governance on MFIs' performance based in Euro-Mediterranean countries (Bassem, 2009), Ghana (Aboagye & Otioku, 2010; Kyereboah-Coleman, 2007; Kyereboah-Coleman & Osei, 2008), Central and Eastern Europe and Newly Independent States (Hartarska, 2005). This is the first study that contributes to the body of knowledge by investigating the corporate governance mechanisms that are significantly improving the financial performance and outreach of MFIs in two countries in South Asian region. Studying the relationship between the internal corporate governance structure and MFI performance in two emerging economies in South Asia may provide guidance which is generalisable, but the lessons learned in this study indicate that caution is necessary.

Finally, this study focuses on two different national governance systems utilising national governance quality indicators to differentiate between them. This is the first study incorporating national governance quality indicators in a corporate governance – performance relationship study. Further, this study applies a dynamic modeling approach to the combined dataset of Sri Lanka and India, controlling for dynamic endogeneity, simultaneity and unobserved time-invariant heterogeneity inherent in the governance – performance relationship. This is the first study to do this for the South Asian region. There are several findings of consequence for policy makers to consider.

9.5 Policy Implications

In the light of the empirical findings of this study, some important policy implications are extracted.

First, corporate governance practices have an impact on MFI financial performance and outreach even though the corporate governance codes are voluntary disclosures for various MFIs. These findings are robustness even after controlling for the

possible impact of historical performance on current performance and other potential sources of endogeneity such as simultaneity and time-invariant unobserved heterogeneity. Therefore, MFIs should be able to foresee the effect of their decisions on financial performance and outreach when they adopt or change their corporate governance mechanisms. Good corporate governance mechanisms in MFIs improve the handling of their resource.

Second, findings in this study should encourage MFIs to consider significant governance factors further in order to improve and sustain the microfinance industry. MFIs have limited options to raise capital for their operations compared to banks and other financial institutions. Lack of funding is considered a major obstacle for the growth of the microfinance sector. Most funding agencies oversee the corporate governance practices of MFIs prior to making funding arrangements. In this study, it is found that there is a positive relationship between international donor representation on boards and outreach, emphasising that donors and funding agencies have a desire to outreach. In order to attract funding agencies and donors, MFIs need to enhance their corporate governance mechanisms to ensure an appropriate balance of outreach reporting as a key metric.

Third, establishing a regulatory framework would mean MFIs have an appropriate minimum capital adequacy requirement. MFIs take risks in lending and a requirement of capital adequacy based on the capital appears to be appropriate. Current monitoring regulation bodies (CBSL and RBI) for banking and non-banking sectors could have an expanded role encompassing MFIs. This is an important matter to protect and maintain the confidence level of depositors, lenders, creditors and investors, especially those from more sophisticated agencies such as the World Bank.

Fourth, the importance of having proper disclosure of information relating to microfinance activities is observed. This research calls for further attention from policy makers to encourage use of an appropriate performance reporting system for the microfinance sector. Industry benchmarks and thresholds for financial performance and outreach in terms of different tier levels of MFIs can be regulated. There are instances where breadth of MFIs' outreach factors are not measured with proper metrics. This may be attributable to a lack of reporting requirements for

MFIs over outreach. Usually most MFIs in both Sri Lanka and India do not collect information, such as the number of jobs created through loan disbursements, the loan circle of the client and the number of beneficiaries of the loans, etc. This type of information can easily be collected through documentation relating to loan application and disbursing loans. A credit officer can ensure the accuracy of a loan application when the MFI receives the completed loan application. By undertaking sport visits, reviewers of loan applications are able to make sure the outreach information proposed in the loan application is being recorded and achieved in practice. However, not many institutions practise keeping proper outreach records, which is exacerbated by a lack of monitoring or supervision of outreach information by statutory institutions. The reporting framework is not adequately specified for the measurement of outreach in terms of tier levels, based on the different criteria such as minimum capital adequacy, number of borrowers and loan portfolio. The promulgation of reporting guidelines would assist to the statutory institution or financial reporting standards. Social performance reporting could be a compulsory requirement for MFIs with an associated external audit. MFIs' governance will improve through training directors and top management in best practice reporting.

Fifth, the role of borrowers on MFI boards is significant in terms of financial performance and is an important area to be considered. Client representatives on the board may potentially challenge the conventional approach in relation to both financial performance and outreach. A borrowers' representative is unlikely to be a spokesperson for the average poorest of the poor client. Consideration of an alternative governance process with a two-tier governance structure similar to boards in Germany may be germane. This would allow for broader input at district levels without significantly increasing board size and travel costs. The establishment of an internet communication link-up right from the outset would set the scene for positive transformational and leadership promotional opportunities at the village level. This could be much more beneficial for a large geographical country such as India.

Sixth, criteria for selecting outside directors for MFIs can be developed. This might lead to a recognition of the need for better orientation and professional development initiatives. The role of board members in terms of their fiduciary responsibility can be extended to improve the outreach and impact for the betterment of MFIs' overall

performance by undertaking progress monitoring. For instance, appointing directors who have finance qualifications to monitor the financial activities of the MFI, a social director who ensures that the MFI adheres to its social mission and a director representing the borrowers of the MFI; what qualifications should he/she have? This may also help to appoint further sub-committees to the board of MFIs.

Finally, the legal framework is a fundamental component of the corporate governance system of a country. To achieve responsibility, accountability, fairness and transparency, a country needs appropriate rules and regulations to monitor the industry activities. This is indicated by the finding of a positive relationship between national-level governance characteristics and MFI performance.

9.6 Limitations and Suggestions for Future Research

This study does have limitations but they do not detract from the robustness of the analysis; rather they push some issues towards possible future research programmes. The primary limitation relates to availability of data in the public domain concerning the make-up of boards of directors and outreach of MFIs in Sri Lanka and India. MIX market, Sa-Dhan and LMFPFA are the best sources of data, but information is often limited, with sparse information about the directors of individual MFIs. Information covering stakeholder representatives on MFI boards is absent which means going to individual MFIs for information if more is required. Some additional data were obtained on a few types of stakeholders, viz outside directors, client representatives and international and/or donor representatives on the board. For future studies, collecting data on other types of stakeholder representatives on MFI boards, such as creditors, government agencies, local communities and rating agencies, may prove fruitful to check their influence on MFI performance in Sri Lanka and India.

Due to the lack of corporate governance data, this study only concentrates on observable director board information. Access to more comprehensive data covering additional characteristics of board members, such as age, prior experience in the banking and microfinance sectors, academic qualifications and professional qualifications in the microfinance sector and other industry experience may enhance understanding of how individual directors' attributes contribute to the

financial performance and outreach of MFIs. A range of ideas for further research are feasible if data can be obtained. More qualitative research might provide insights on leadership styles and ethical and moral behaviour of directors (Adams & Ferreira, 2009; Mohan, 2014). A comparison of the behaviour of different stakeholders will illuminate their intention to fulfill their objectives and contribute to a unified board. This study points to likely benefits of research exploring further the impact of female board members and MFI performance and how to integrate women onto boards in ways that will add value to MFIs.

This study used three outreach variables - breadth of outreach, percentage of women borrowers and depth of outreach - as it was possible to access that data. Further research may formulate other metrics and obtain the necessary data to enrich understanding of this aspect of MFI performance. This information could include the ratio of rural to urban clients in the portfolio, the number of clients who obtain second or subsequent loans, the number of loans disbursed to lowest-income clients based on family income levels, the number of jobs created after the loan and the number of businesses started in the loan circle will contribute to policy formulation especially around the MFI mission drift.

It is important to identify better performance measures that capture the dual objective of MFIs. Women's World Banking has developed financial and social performance indicators that allow MFIs to analyse the outreach to women clients in more detail. This helps to consider not only how many women an MFI serves but how well it is serving. For example, instead of women clients as a percentage of total clients, scholars can use women clients as a percentage of new clients which would help to identify the direction of a particular MFI (Women's World Banking, 2013).

Like most prior studies on corporate governance, this study suffers from sample selection bias which is caused by the availability of data (Stock & Watson, 2007). It is natural to expect a study of this nature on an emerging topic such as MFI corporate governance in South Asia could pose a problem of sample size. Even though it is ideal to have a large sample, many institutions do not fulfil the required primary data, especially the corporate governance information. This study concentrates on formal MFIs that are registered under a regulatory body for the

country in which they operate. The selected MFIs all have an external audit for their annual financial statements. There are MFIs in Sri Lanka and India that are excluded in this study because they are informal MFIs. Typically this form of MFI does not have reliable financial reports as being audited is not compulsory. The role played by the informal MFIs in both economies may be substantial, especially in terms of contribution to low income people in these countries. Further research may wish to take into account the effect of governance on performance of informal MFIs and/or non-audited MFIs, though integrity of data may be an insurmountable problem.

The data used for this study covers six years for MFIs in Sri Lanka and India. Non-availability or reliability issues surrounding data in many institutions going further back than six years is a problem. In the future, more years' of data will become available permitting re-estimation of relationships between corporate governance, financial performance and outreach of MFIs in Sri Lanka and India. Consistent with Wintoki et al. (2012), a larger dataset, covering a longer period, may assist in regard to endogeneity of the variables.

Inclusion of additional corporate governance variables or control variables for the governance – performance relationship studies in the future should provide broad knowledge about the microfinance sector and may lead to different conclusions. CEO tenure, executive remuneration, types of donors, the number of MFI branches, the number of loan officers are still an open ground for further research as long as the relevant data are available. The present study concentrates on the financial services offered by MFIs in Sri Lanka and India and does not investigate non-financial services offered in microfinance sector, such as consultancy services, entrepreneurial training, remittances, savings facilities and insurance services. The omission relates only to the difficulties in collecting data and its reliability. Future studies of MFIs may encompass non-financial services of MFIs where obtaining appropriate reliable data is tractable.

Undertaking studies in other countries is likely to clarify the impact of corporate governance practices on MFI performance, as each country has its own characteristics.

9.7 Conclusion

This chapter incorporates discussion of the empirical results reported in Chapters 6, 7 and 8. In general, the findings support the view that there is a statistically significant relationship between corporate governance and performance of MFIs. Interestingly, this study finds that few of the corporate governance mechanisms that are recommended in the industry guidelines as important, are significant in terms of impact on the performance of MFIs in Sri Lanka and India. This chapter further reveals that corporate governance practices impact differently on financial performance and outreach. The comparative analysis of the corporate governance-performance relationship emphasises that the performance effects of corporate governance structure vary significantly between Sri Lanka and India. This supports the view that the performance effects of corporate governance practices are country-specific and depend on institutional and cultural differences. The results of this research lead to important policy implications for the microfinance sectors in Sri Lanka and India.

The vision of a poverty free world is yet to be achieved. The microfinance sector needs to be more effective if it wants to become the miracle cure for poverty and source economic development. Now the sector is attempting to reinvent itself and it has a long way to go as there are billions of people in the world living in extreme poverty. If governments can impose a regulatory framework for microfinance activities through dedicated and qualified regulators who understand the sector particularly, then the MFI sector can play a great role in poverty alleviation.

Finally, this study concludes by highlighting the necessity for having proper training and development in governance initiatives for MFI boards to stimulate the overall financial performance and social impact of MFIs. Expanding the research to other countries, longer time periods, more MFIs and more MFI services may lead to better understanding of the governance – performance relationship.

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APPENDIXES

Appendix 01 shows a summary of the different regulations and supervisions applicable for institutions that are conducting microfinance activities in Sri Lanka

Institution	SANASA TCCSs & CRBs	SBSs	RDBs	LCBs, LSBs, RFCs, SLCs and ICs	Guarantee limited companies, private companies, unlimited companies, NGO-MFIs, societies, village banks, community based organisations & voluntary social service organisations
Regulatory Authority	DCD	Samurdhi Authority	CBSL	CBSL and Insurance Board of Sri Lanka	No regulatory authority
Supervisory Authority	DCD	Samurdhi Authority	CBSL	CBSL and Insurance Board of Sri Lanka	No supervisory authority but need to provide budgets and progress reports to the NGO secretariat of the government.
Legislation	Co-operative Societies Law No.5 of 1972	Samurdhi Authority Act No.30 of 1995	Regional Development Banks Act No.15 of 1985	Banking Act No.30 of 1988, Finance Companies Act No.78 of 1988 (repealed by Act. No.42 of 2011 for Finance Business), Finance Leasing Act No.56 of 2000, Insurance Industry Act No.43 of 2000 and Company Act No.7 of 2007	Companies Act, No.7 of 2007, Societies Ordinance No.16 of 1891, Voluntary Social Service Organisations Act No.31 of 1980

Banking Act No.30 of 1988 (amended Act No.46 of 2006)

This law applies to LCBs and LSBs. For an example, the SDB and RDB are LSBs that conduct microfinance activities on a large scale. LCBs are also involved in microfinance activities but they provide a very small percentage of microfinance loans when compared to the overall portfolio of the sector (Atapattu, 2009). Banking licences are issued by the Monetary Board of the CBSL with the approval of the Minister of Finance. The Banking Act of Sri Lanka requires any banking business or a public company that intends to carry out banking activities to obtain the authority through a banking licence.

Finance Companies Act No.78 of 1988 repealed by Finance Business Act No.42 of 2011

With effect from 9 November 2011, companies that carry out finance activities are required to be registered under the Finance Business Act No.42 of 2011 prior to accepting deposits from clients. This Act was introduced to strengthen the regulation and supervision of non-banking financial activities of Sri Lankan RFCs and to curb the unauthorised finance businesses.

Finance business means the “business of acceptance of deposits, and the lending of money, or the investment of money in any manner whatsoever, or the lending of money and the investment of money in any manner whatsoever” (Finance Business Act, No. 42 of 2011, p. 85). A company shall not be eligible to license as a finance company under this Act unless it is registered under the Companies Act, No.7 of 2007. The Central Finance Company and the Alliance Finance Company in Sri Lanka are examples of companies that conduct their microfinance activities as a finance company registered under this Act.

This Act has vested the control and administrative power to the Monetary Board of CBSL as the license is required to carry out financial business in Sri Lanka. The Department of Supervision of NBFIs of the CBSL carries out the regulatory and supervisory functions in respect of RFCs.

Finance Leasing Act No.56 of 2000

The Finance Leasing Act No.56 of 2000 (amended by Act No.24 of 2005 and No.33 of 2007) states that a certificate of registration is necessary to conduct finance

leasing business. Four types of institutions are entitled to register as Registered Finance Leasing Establishments: LCBs and LSBs registered under Banking Act No.30 of 1988, RFCs registered under Finance Business Act No.42 of 2011, and public companies incorporated under the Companies Act, No.7 of 2007 of Sri Lanka having the prescribed amount of capital (Regulation No.1 of 2010). The regulatory and supervisory functions relating to SLCs are carried out by the Department of Supervision of NBFIs of the CBSL. LOLC microfinance company is an example of a leasing company which carries MFIs activities in Sri Lanka. In addition, this Act assesses whether the SLCs' are compliance with statutory requirements, relevant laws and regulations, internal controls and the standards of corporate governance. Further, SLCs are not permitted to accept money from the public as deposits. Nevertheless, with the prior approval of the Director, Department of Supervision of NBFIs of the CBSL, they can borrow money by issuing debt instruments such as promissory notes, commercial paper and debentures.

Insurance Industry Act No.43 of 2000 (amended Act No.3 of 2011)

This Act (amended by No.27 of 2007 and No.3 of 2011) enables the establishment of an insurance board for the purpose of developing, supervising and regulating the insurance industry by revoking the control of Insurance Act No.25 of 1962 and the matters connected therewith or incidental thereto.

Co-operative Societies Law No.5 of 1972 (amended Act No.11 of 1992)

The Co-operative Societies Law No.5 of 1972 (amended by Act No.5 of 1972, No.37 of 1974, No.11 of 1980, No.32 of 1983 and No.11 of 1992) was passed to provide the development of co-operative societies and address the issues related to the constitution and control of co-operative societies in Sri Lanka. They are entitled to make loans to members and accept deposits. Women's Bank and SSSs are examples for which this Act applies.

Samurdhi Authority Act No.30 of 1995 (amended Act No.2 of 1997)

The Samurdhi Authority of Sri Lanka Act No.30 of 1995 (amended by Act No.2 of 1997), or else Samurdhi Authority Act was a government initiative for the provision of welfare services through the state and it provides the ability to mobilise savings and extend credit facilities to poor people for their well-being and economic transformational development. Samurdhi Bank Societies are established under this special parliament Act.

Societies Ordinance No.16 of 1891

The Societies Ordinance No.16 of 1891 makes provision for the registration of mutual provident and other societies. To register as a society under this Ordinance, the society should consist of at least seven persons. Societies can establish with the objective of promoting thrift, giving relief to members for their distress and aiding them when in pecuniary difficulties.

Regional Development Banks Act No.15 of 1985 (amended Act No.30 of 2011)

The Regional Development Bank Act No.15 of 1985 was initially introduced to establish 17 RRDBs. Due to the cost effectiveness and lack of sustainability of 17 RRDBs, they were merged to six RDBs by enacting the Act No.6 of 1997. Further, to shrink operating costs, six RDBs were merged into a single RDB in 2010 by the Pradeshiya Sanwardana Bank Act No 41 of 2008. Section 4 of the previous Act was repealed by the Act No.30 of 2011.

Companies Act No. 7 of 2007

Many institutions who conduct microfinance business are registered under the Companies Act No.7 of 2007. This Act governs the creation, activities, and dissolution of companies in Sri Lanka. Under this Act, a company registered as a limited liability company, or an unlimited company or company limited by guarantee is able to carry out microfinance business in Sri Lanka. All the finance companies are required to be incorporated and registered under this Act prior to incorporate under Banking, Finance Business, Leasing or Insurance Acts. However, there is no proper supervising or monitoring for MFIs established under the

Company Act. However, companies who conduct microfinance businesses under the Company Act are prohibited by law to mobilise public deposits.

Voluntary Social Service Organisations Act No. 31 of 1980

NGOs and social service organisations in Sri Lanka are registered under the Voluntary Social Service Organisations (Registration and Supervision) Act No. 31 of 1980 (amended by Act No. 8 of 1998). This Act regulates the constitution, registration, and supervision of voluntary social service organisations and NGOs. The Act does not permit any NGOs to carry out micro credit operations. However, some NGOs are engaging with economic transformational development. It is at complete variance with micro credit operations, as no repayments are received by NGOs.

Microfinance Bill

Sri Lanka has been working on establishing a Microfinance Bill since 2007. In order to strengthen the MFIs activities, a proposed Microfinance Act was first released to the public in August 2010, which included setting up a Microfinance Regulatory and Supervisory Authority to license, register, regulate, supervise and strengthen companies, NGOs, societies and co-operative societies carrying out microfinance business. In June 2015, a draft legal framework for the regulation and supervision of MFIs was introduced by LMFPFA, adding more operational details to the first draft.

Appendix 02 below provides a summary of the different regulations and supervisions applicable for institutions that are conducting microfinance activities in India

Institution	Societies	Public/ Private Charitable Trusts	Not-for-profit Companies (section 25 companies)/ Associations	NBFCs	NIDHI (Mutual Benefit Society) Companies	State Co- operative Banks and District Central Co- operative Banks	Urban Co-operative Banks	Co-operative Societies
Regulatory Authority	Registrar of Societies in each state	No specialised authority	Company Law Board	RBI	RBI	RBI	Registrar of Co- operative Societies and RBI	Registrar of Co- operative Societies
Supervisory Authority	Registrar of Societies in each state	No specialised authority	Company Law Board	RBI	RBI	RBI	Registrar of Co-operative Societies and RBI	Registrar of Co- operative Societies
Legislation	Societies Registration Act No.21 of 1860	Indian Trust Act No.2 of 1882	Societies Registration Act No.21 of 1860 or Indian Trust Act No.2 of 1882 or Section 25 of the Companies Act of 1956 or under special licensing	Companies Act of 1956 and Section 45- IA of the RBI Act of 1934	Section 620 of the Companies Act of 1956	Banking Regulation Act No.10 of 1949, Banking Laws (Application to Co-operative Societies) Act of 1965, RBI Act of 1934, Co- operative Societies Act of 1912 or State- level Co-operative Societies Acts	Co-operative Societies Act of 1912, RBI Act of 1934, Banking Regulation Act No.10 of 1949, Banking Laws (Application to Co-operative Societies) Act of 1965, State-level Co- operative Societies Acts and Multi-State Co-operative Societies Act (MSCA) of 2002	Co-operative Societies Act of 1912, State-level Acts on Mutually Aided Co-operative Societies, Banking Regulation Act No.10 of 1949 and Banking Laws (Application to Co- operative Societies) Act of 1965

Reserve Bank of India (RBI) Act of 1934

The RBI Act of 1934 (amended by 2009) outlines the role of the RBI in financial management. Onsite supervision was introduced in 1995 and CAMELS³⁹ was introduced in 1997 to strengthen the regulation and supervision of the banking sector in India. NBFCs are currently playing a vital role in the Indian financial sector and are regulated under Section 45-IA (Chapters III-B, III-C and V) of the RBI Act. Further they have to fulfil the requirements of board of directors, share capital, management structure, audits, meetings, maintenance as well as publication of financial statements in accordance with Companies Act 1956 (Sa-Dhan, 2006). However, there is no separate category for NBFCs operating in a microfinance sector (RBI, 2011). The Malegam Committee recommended in their report that a separate category of NBFC-MFIs has been created to encourage the growth of the microfinance sector with an appropriate legal framework. They recommended several regulatory requirements that need to be fulfilled by NBFC-MFIs when they are providing services in the microfinance sector. Under the variety of existing legal forms in the Indian microfinance sector, not only are NBFCs regulated by the RBI, but section 25 companies and co-operative banks are also regulated by RBI rules (Frankfurt School of Finance & Management, 2009; Sinha, 2009).

Banking Regulation Act No. 10 of 1949

The Banking Regulation Act No. 10 of 1949 (amended by 2004) forms the core banking law in India as Indian commercial banks are regulated by RBI under this Act. As prescribed by the Act, Indian commercial banks must comply with the formats and standards when they prepare financial statements and are required to obtain independent assurance reports on their financial statements. Statutory auditors are appointed with the approval of the RBI by the commercial banks. The Act also applies for the State Co-operative Banks, District Central Co-operative Banks and Primary Co-operative Banks (Urban Co-operative Banks-UCBs) while the Act recognises only the Primary Co-operative Banks as the relevant category of co-operative banks suitable for MFIs (Sa-Dhan, 2006). According to the Act, the Primary Co-operative Bank means a primary credit society other than a primary

³⁹ CAMELS - Capital adequacy, asset quality, management quality, earnings, liquidity and system.

agricultural credit society where the primary objective or the principal business is the transaction of banking business.

Co-operative Banks that are registered under the Co-operative Societies Act of 1912⁴⁰ are governed by the Banking Regulations Act of 1949 and the Banking Laws (Application to Co-operative Societies) Act of 1965⁴¹ and regulated by the RBI (Frankfurt School of Finance & Management, 2009). Since then, the government has given the authority to the provinces to enact their own co-operative laws to suit the province. Accordingly, the State Co-operative Banks and the District Central Co-operative Banks have to register under the state-level co-operative societies Acts in each state. In addition, UCBs that have members in more than one state (multi-state presence) and have extended their operations to more than one state must be registered under the MSCA 2002. The banking activities in the UCBs are regulated and supervised by the RBI whereas the managerial and administrative activities are regulated and supervised by the state government or the central government if they are registered under State Co-operative Societies Act or MSCA 2002.

Indian Trusts Act No. 2 of 1882

A trust may be created for any lawful public objective unless it isn't forbidden by the law. In India, different states have different Trust Acts which govern under the more detailed Public Trust Act. However, if there is no any state-specific trust Act then the broad principles of the Indian Trusts Act 1882 (amended by Act No.3 of 1908, No.1 of 1961, No.21 of 1917, No.31 of 1920, No.37 of 1925 and No.18 of 1934) will be applied for trusts operating on a national scale (Frankfurt School of Finance & Management, 2009). To register as a trust there need to be two minimum trustees but there is no upper limit. NGOs with a non-profit objective took up

⁴⁰ Co-operative Societies Act, 1912 was introduced after the Co-operative Society Act of 1904 was repealed, as it only enables the formation of "agricultural credit co-operatives" in villages in India under Government sponsorship.

⁴¹ Banking Laws (Application to Co-operative Societies) Act of 1965 is a further amendment to the RBI Act, 1934 and the Banking Regulation Act, 1949 and the purpose of Act is to regulate the banking business of certain co-operative societies in India.

microfinance activities, registered as public charitable trusts⁴² or as private⁴³, determinable trusts with specified beneficiaries/members. In the MFI context, a trust can be declared by a non-testamentary instrument called a Trust deed. Under the provisions of this Act, a trust must maintain proper and regular accounts in compliance with generally accepted accounting norms. Further, periodic audits of financial statements by a qualified chartered accountant are necessary to examine the validity of documents prepared by the trust. Also these are largely exempt from the income tax due to the charitable nature of their operations (Sa-Dhan, 2006).

Societies Registration Act No.21 of 1860

This Act was introduced for the registration of Literary, Scientific and Charitable Societies to improve the legal condition of the societies established for the promotion of literature, science or the fine arts or the diffusion of useful knowledge/political education or for charitable purposes. The Society Registration Act is mainly based on the Literary and Scientific Institutions Act, 1854. However, every state in India has its own legislation for societies in their state, thus the Act No. 21 of 1860 is the federal Act.

Under this Act, societies can be formed by seven people via a memorandum of association and should file with the Registrar of Societies. The governing body of the society are the governors, councillors, directors, committee, trustees or any other body that is managing the rules and regulations of the society. The principal Act does not provide any guidelines to maintain account or conduct audits for societies. But the provisions made in various independent laws that were enacted by various state governments, required societies to maintain proper accounts, cash book and have their accounts audited once a year through qualified auditors.

Similar to trusts, NGOs established as not-for-profit organisations are mostly registered under this Act and engaged in microfinance activities. Based on the public nature of microfinance activities and MFI support for poverty eradication, people interpreted microfinance activities as charitable for the purpose of this Act.

⁴² Public trusts are mainly providing their services to the public as charitable or religious trusts.

⁴³ Private charitable trusts provide service to one or more individuals who are definitely ascertained in a given time period.

But any society has to mention its microfinance activities clearly in the memorandum of association. The income generated through microfinance operations of a society is exempt from income tax. However, the Registrar of Societies does not have any responsibility for any form of prudential regulation or determination of microfinance activities' financial performance or solvency (Sa-Dhan, 2006, p. 10).

Foreign Contribution (Regulation) Act of 1976

Societies and trusts which are registered under the Societies Registration Act No.21 of 1860 and the Trust Act No. 2 of 1882 have to register under the Foreign Contribution (Regulation) Act 1976, if they are going to accept foreign contribution. This Act defines foreign contribution as the donations or delivery of transfer made by any foreign source or any organisation within India whose original source is foreign. To obtain foreign grants, MFIs need to register with the Secretary, Ministry of Home Affairs, New Delhi and periodically they have to report the received foreign grants (Sa-Dhan, 2006).

Section 25 of the Companies Act of 1956

This Act was established for promoting commerce, art, science, religion, charity or any other useful object where the profit or any other income generated from the entity should only be used for promoting the objects of the entity but not for any individual member. This Act allows companies to register as a limited liability company without adding 'Limited' or 'Private Limited' to their company names. These companies are exempted from some of the provisions in the Companies Act, 1956 such as appointment of directors, holding of annual general meetings, disclosure of annual returns for income tax and appointment of the company secretary. These companies need a minimum of three trustees to register their company but there is no maximum number.

Non-profit-organisations can be registered under this Act while some NGOs are also registered under this Act as not-for-profit organisations. Most of the regulatory requirements applied for NBFCs under the section 45 IA of the RBI Act do not apply for the companies registered under section 25 of the Companies Act. However, the entity has to be registered with RBI if it is willing to accept deposits.

One of the major benefits for section 25 companies is that they are exempt from the paying tax under Section 12(1) of the Income Tax Act. Unlike societies and trusts, the Insurance Regulatory and Development Authority allows section 25 companies to become corporate agents of the IC as they are registered under the Companies Act 1956 (Sa-Dhan, 2006).

Section 620 of the Companies Act of 1956

A special type of company called a ‘Nidhi⁴⁴’ company, which is also known as ‘Mutual Benefit Society’, is registered under this Act. Certain provisions of the Company Act, such as service of documents, issue of additional capital, annual returns, dividends, loans and remuneration to directors and winding up processes have been modified (restricted or relaxed) for these companies under section 620. All the clients can be treated as members of the company under section 620. A company can only accept deposits from its members and grant loans to members by keeping collateral, such as property or jewellery. Nidhi companies have very liberal provisions when compared with NBFCs as they do not want to get investment grade ratings and do not require to be registered with the RBI. Similar to societies and trusts, Nidhi companies cannot hold share capital (Sa-Dhan, 2006).

State-level Acts on Mutually Aided Co-operative Societies

This Act enabled the registration of co-operative societies (thrift co-operatives) in India by providing greater autonomy and freedom for co-operatives in the states without depending on state funding. This Act was supported to reduce the state interference for co-operatives through culminating the nationwide loan pardon scheme of 1989, which has resulted in reduced portfolios for many co-operatives. Different states in India issue legislation and ordinance to regulate the activities of MFIs. For instance the Andhra Pradesh government incorporation with the Co-operative Development Foundation enacted the progressive Andhra Pradesh Mutually Aided Co-operative Societies Act in 1995 which enabled the registration of Thrift Co-operatives in India. Similar provisions were made to another six Indian states and a central multi-state Act was formed to provide for a new type of “mutual

⁴⁴ Nidhi is the Indian language, means “treasure”.

benefit” co-operative significantly controlled by the Indian government (Sinha, 2009).

The Indian Moneylenders’ Act of 1918

This Act was introduced to monitor the usurious interest rates charged by moneylenders from low income farmers (Sa-Dhan, 2006). However, after the Independence and enactment of the Indian Constitution, the different states brought their own legislation to govern money lending activities. For instance the Andhra Pradesh Micro Finance Institutions (Regulation of Money Lending) Act was approved by the Andhra Pradesh Legislative Assembly on 14th December 2010 to regulate the MFI activities (except government supported MFIs), and which is applied to NBFCs as well. Similar to Andhra Pradesh, in Kerala state, NBFCs that are operating microfinance activities have to register under the state money lending statute enacted by the Kerala government. Normally, in most Indian states, the Registrar General, who is appointed by the state government in India, has the supreme authority in the state on matters of money lending.

The registration of this Act is exempt for banks, statutory corporations, co-operatives and financial institutions as they fall under the purview of the RBI but are applicable for the MFIs registered as societies and trusts. Accordingly, Malegam committee recommended that NBFCs should also exempt from the provisions of the Money Lending Act as they are already regulated with the RBI Act. Further, the Malegam Committee has highlighted that if the recommendations of the committee report are accepted by the government then it is not necessary to have a separate Act for Andhra Pradesh MFIs (RBI, 2012).

The Micro Finance (Development and Regulation) Bill

The Bill, which applies to microfinance activities, was introduced in May 2012 (Zhang & Wong, 2014) by the Central Government but has recently been rejected by the Indian parliament due to the overriding existing state governments’ legislation. The new version of the Bill is at discussion level. The Bill formed the first legal document that defines ‘microfinance’, setting down concise guidelines for the Indian microfinance industry and a promotional and regulatory framework for MFIs, especially those carrying out microfinance in a non-profit form.